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Zingale et al.

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(54) **MANAGEMENT OF CORPORATE ENTITIES**

715/818, 853, 854, 855; 705/26–27, 67,
 501.1, 100

(75) Inventors: **Thomas B. Zingale**, Pomona, NY (US);
Stacy Lyons, Brooklyn, NY (US);
James B. McHugh, Maplewood, NJ
 (US); **Jean Boulet**, Brooklyn, NY (US)

See application file for complete search history.

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(73) Assignee: **Goldman, Sachs & Co.**, New York, NY
 (US)

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 U.S.C. 154(b) by 851 days.

(21) Appl. No.: **10/635,252**

(22) Filed: **Aug. 6, 2003**

* cited by examiner

(65) **Prior Publication Data**

US 2004/0066409 A1 Apr. 8, 2004

Related U.S. Application Data

(60) Provisional application No. 60/401,285, filed on Aug.
 6, 2002.

(51) **Int. Cl.**
G06F 3/048 (2006.01)
G06F 3/01 (2006.01)

(52) **U.S. Cl.** **715/853**; 715/205; 715/206; 715/764;
 715/790; 715/810; 715/817; 715/854; 715/855

(58) **Field of Classification Search** 715/764,
 715/790, 530–531, 501, 205, 206, 810, 817,

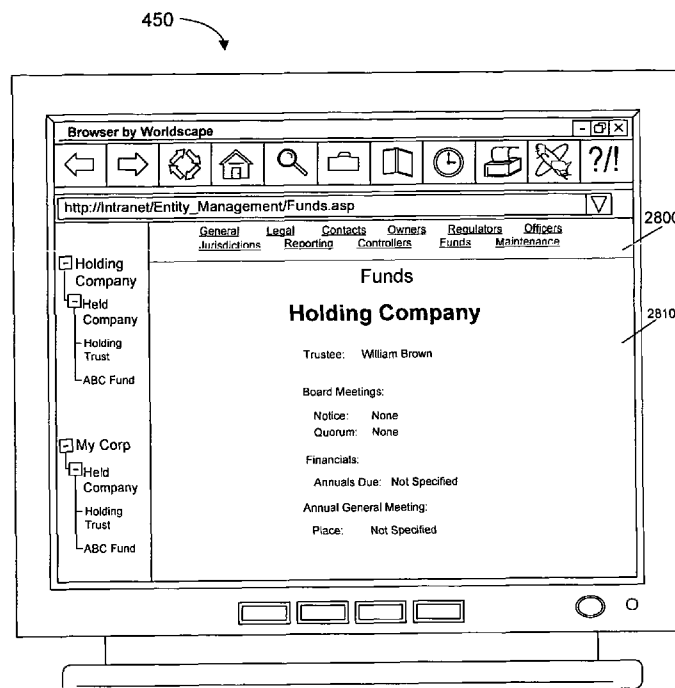
Primary Examiner — Nicholas Augustine

(74) *Attorney, Agent, or Firm* — Perkins Coie LLP

(57) **ABSTRACT**

Systems and methods are provided to facilitate corporate
 entity management. According to some embodiments, a user
 interface is provided including an entity selection area allow-
 ing selection of at least one corporate entity from a plurality of
 corporate entities, and a plurality of selectable elements, each
 of the selectable elements being selectable to cause presen-
 tation of an associated area, wherein an area associated with
 each of the plurality of selectable elements presents informa-
 tion relating to the at least one corporate entity and to the
 associated selectable element.

24 Claims, 30 Drawing Sheets



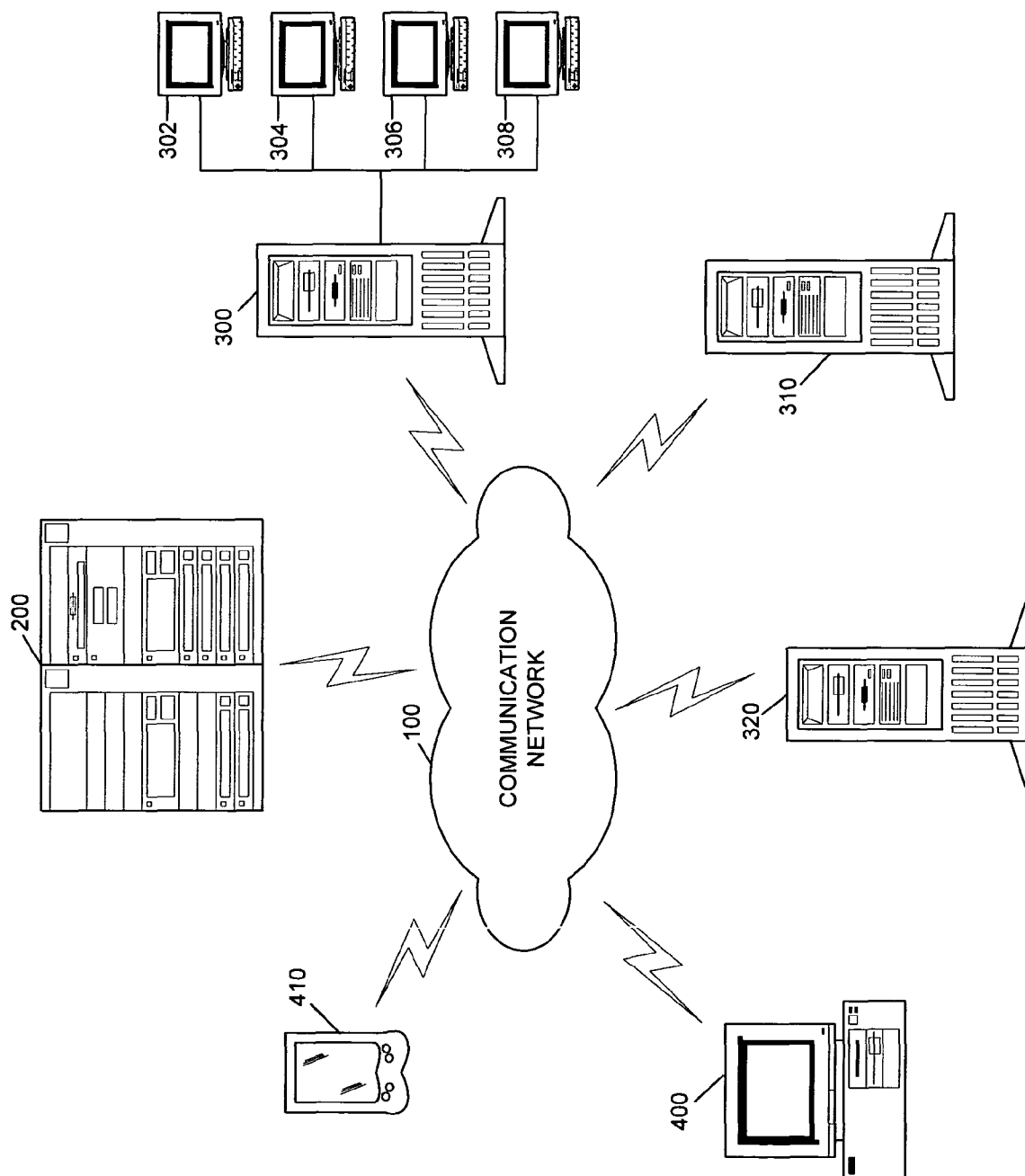


FIG. 1

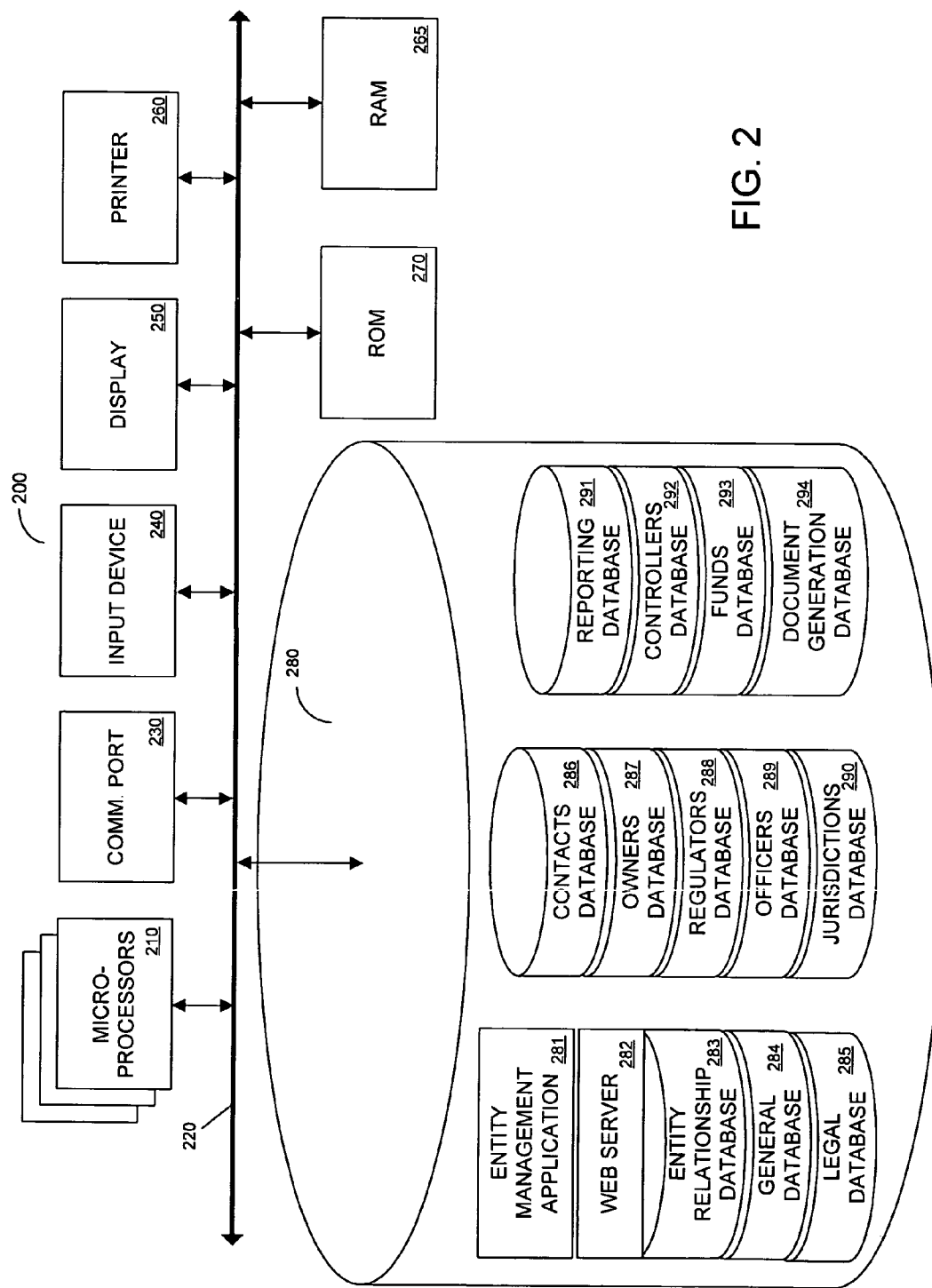


FIG. 2

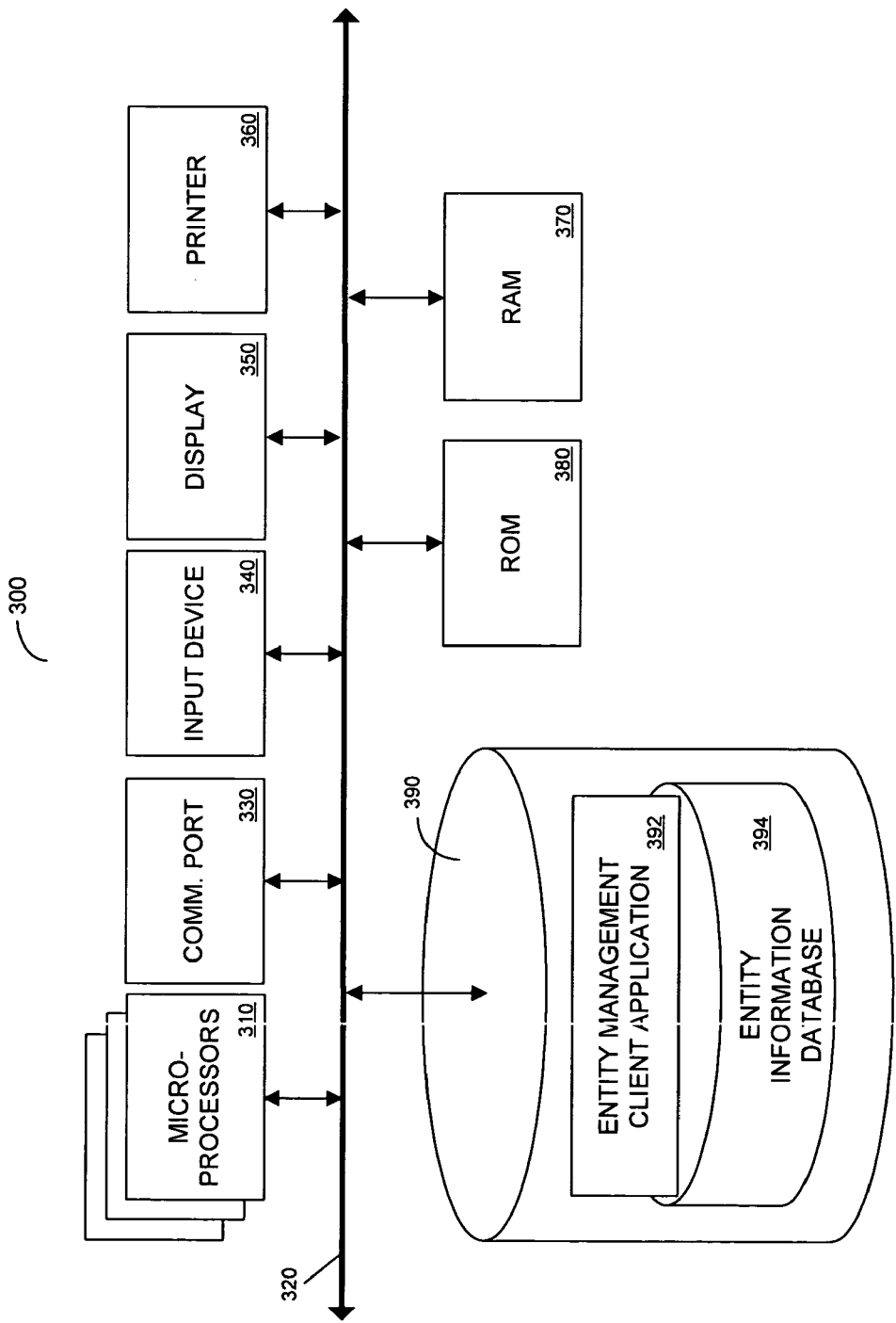


FIG. 3

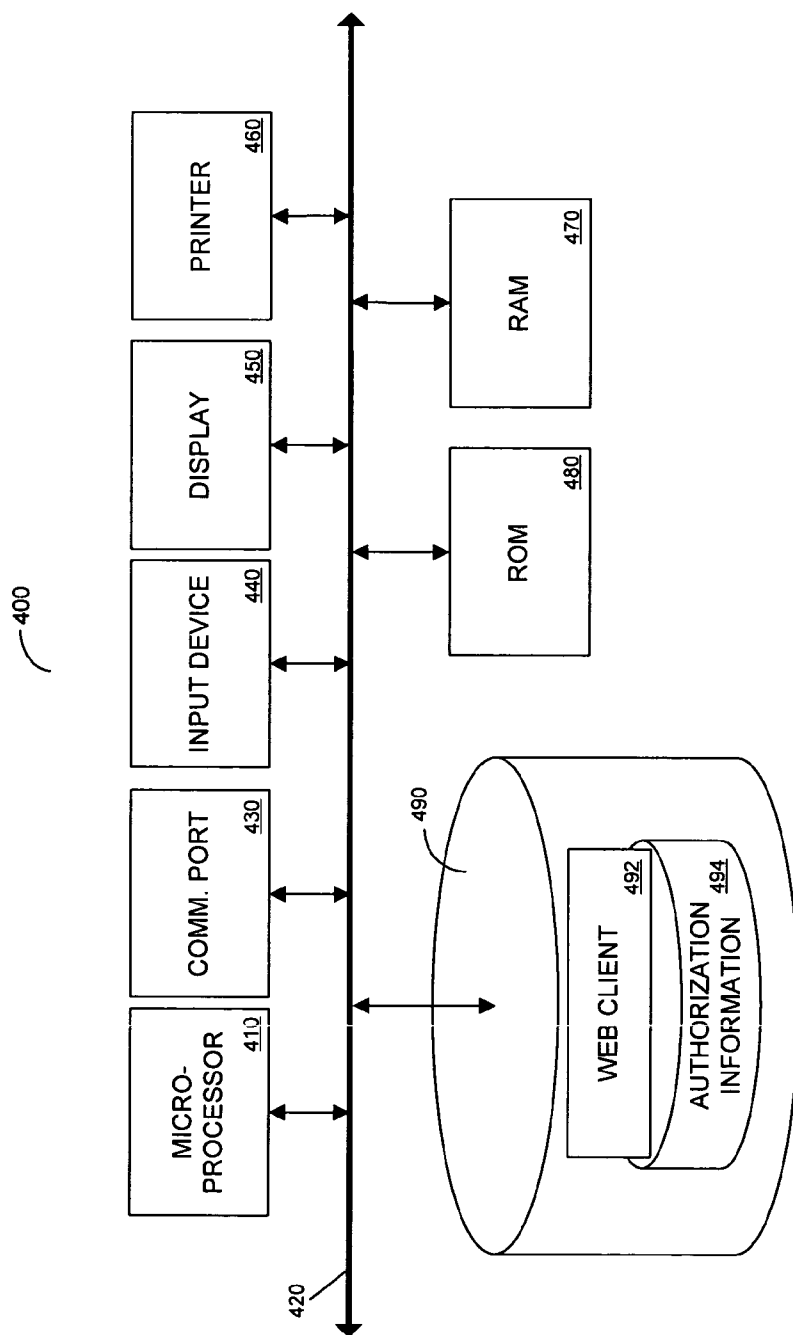


FIG. 4

283

ENTITY ID 601	UPSTREAM ENTITIES 602	DOWNSTREAM ENTITIES 603
E017	E163, E501	E175, E394
E163	NONE	E017
E175	E017	NONE
E394	E017	NONE
E501	NONE	E017

FIG. 5

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ENTITY ID 601	NAME 602	TYPE 603	STATUS 604	DOMICILE 605	TAXPAYER ID 606	FORMED 607	DISSOLVED 608
E017	HELD COMPANY	INC.	ACTIVE	DELAWARE	13- 7960643	3/4/1997	---
E163	HOLDING COMPANY	LLC	ACTIVE	DELAWARE	10- 9437566	1/1/1994	---
E175	HOLDING TRUST	LTD	ACTIVE	CAYMAN IS.	13- 8035830	3/4/1997	---
E394	ABC FUND	L.P.	INACTIVE	MADRID	13- 8246721	3/4/1997	5/3/2000
E501	MY CORP	LLC	ACTIVE	CAYMAN IS.	11- 1101173	2/3/1998	---

FIG. 6

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ENTITY ID 701	ORIGINAL MINUTE BOOK 702	DUPLICATE MINUTE BOOK 703	CORPORATE SEAL 704	STOCK CERTIFICATE 705	DIRECTORS 706	QUORUM 707
E017	NY LEGAL	NY LEGAL	NYLEGAL	NY LEGAL	12	8
E163	UNKNOWN	DELAWARE CORPORATE	DELAWARE CORPORATE	NONE	8	6
E175	NY LEGAL	CAYMAN LEGAL	CAYMAN LEGAL	CAYMAN LEGAL	10	6
E394	NY LEGAL	MADRID LEGAL	MADRID LEGAL	NONE	10	7
E501	UNKNOWN	UNKNOWN	UNKNOWN	NONE	12	9

FIG. 7

286

ENTITY ID 801	CONTACT 802	TITLE 803	START DATE 804	END DATE 805	CONTACT INFORMATION 806
E017	J. SMITH	PRIMARY ATTORNEY	12/12/2000	---	---
E017	P. DAVIS	SECONDARY TAX CONTACT	10/7/2001	3/4/2002	212-766-4301 P.DAVIS@HOLD_COMPANY.COM
E017	J. DOE	CONTROLLER CONTACT	12/12/2000	---	111 ELM STREET STAMFORD, CT 06950
E175	S.TODD	PRIMARY ATTORNEY	8/4/1998	---	609-849-3344
E175	J. HOPE	AUTHORIZED SIGNATORY	8/4/1998	---	J.HOPE@HOLDING_TRUST.COM

FIG. 8

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ENTITY ID 901	OWNER ID 902	TYPE 903	START DATE 904	END DATE 905	PERCENT HOLDING 906
E017	E163	CLASS A	3/4/97	---	75%
E017	E501	CLASS B	2/3/98	---	25%
E175	E017	CLASS A	6/8/98	---	100%
E394	E017	CLASS A	3/4/97	5/3/00	100%

FIG. 9

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ENTITY ID <u>1001</u>	REGULATOR <u>1002</u>	COUNTRY/REGION <u>1003</u>
E017	BANK OF DELAWARE	U.S.A.
E017	SECURITIES AND EXCHANGE COMMISSION	U.S.A.
E017	CARIBBEAN EXCHANGE COMMISSION	CARIBBEAN

FIG. 10

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ENTITY ID 1101	NAME 1102	TITLE 1103	SIGNATORY POWER 1104
E017	J. SMITH	DIRECTOR	ALL
E017	J. JONES	DIRECTOR	ALL
E017	H. WHITE	TREASURER	FINANCIAL DOCUMENTS
E017	P. BLACK	ALTERNATE DIRECTOR	ALL, IF DIRECTORS CANNOT BE REACHED
E017	R. GREEN	EXECUTIVE COMMITTEE MEMBER	NONE
E017	T. STREET	ASSISTANT SECRETARY	NONE

FIG. 11

290

ENTITY ID 1201	QUALIFIED 1202	TYPE 1203	REPORTING 1204	JURISDICTION ID 1205	QUALIFY DATE 1206	EXPIRE DATE 1207
E017	DELAWARE	MAIN OFFICE	YES	D34-9378	3/4/1997	3/4/2003
E017	HONG KONG	BRANCH OFFICE	NO	HK-93421	5/5/1999	--
E163	DELAWARE	BRANCH OFFICE	YES	D27-4110	1/1/1994	1/1/2003
E175	CAYMAN ISLANDS	BRANCH OFFICE	NO	C113-378	3/4/1997	--
E501	CAYMAN ISLANDS	MAIN OFFICE	NO	C184-492	2/3/1998	--
E501	HONG KONG	BRANCH OFFICE	NO	HK-93758	2/5/1998	--

FIG. 12

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ENTITY ID <u>1301</u>	REPORT <u>1302</u>	DOMICILE/ JURISDICTION <u>1303</u>	DUE <u>1304</u>	SENT <u>1305</u>
E017	TAX NOTICE	DELAWARE	4/15/2002	3/10/2002
E017	COMPLIANCE VERIFICATION	DELAWARE	12/31/2002	---

FIG. 13

292

ENTITY ID 1401	CONSOLIDATION TYPE 1402	CONTROLLERS ENTITY TYPE 1403	SAO ID 1404	SAO CONTACT INFORMATION 1405	SCRIP AUTOMATED ? 1406
E017	CONSOLIDATED	NONE	ACS	44(20)7992-3008 ANGELA.SALTER @GS.COM	YES
E163	NOT CONSOLIDATED	NONE	JFD	44(20)4737-8448 JORDAN.DACHS @GS.COM	YES
E501	CONSOLIDATED	LLP	JLH	44(20)7242-3123 JEAN.HERRING@ GS.COM	NO

FIG. 14

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ENTITY ID 1501	TRUSTEE 1502	BOARD NOTICE 1503	BOARD QUORUM 1504	ANNUALS DUE 1505
E163	NOT SPECIFIED	NONE	3	NOT SPECIFIED
E017	WILLIAM BROWN	14 DAYS	3	12/31
E501	CATHERINE GREEN	7 DAYS	5	NOT SPECIFIED

FIG. 15

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DOCUMENT ID 1601	DOCUMENT NAME 1602	DOCUMENT TEMPLATE 1603
D011	SIGNATORY TEXT BLOCK	//DOCUMENTS/SIGNATORY_BLOCK.TMP
D017	PROPERTY AGREEMENT	//DOCUMENTS/PROPERTY.TMP
D018	JOINT DEVELOPMENT AGREEMENT	//DOCUMENTS/JOINT_DEV.TMP
D073	NON- DISCLOSURE AGREEMENT	//DOCUMENTS/NON_DISCLOSURE.TMP
D105	CONFIDENTIALITY AGREEMENT	//DOCUMENTS/CONFIDENTIALITY.TMP

FIG. 16

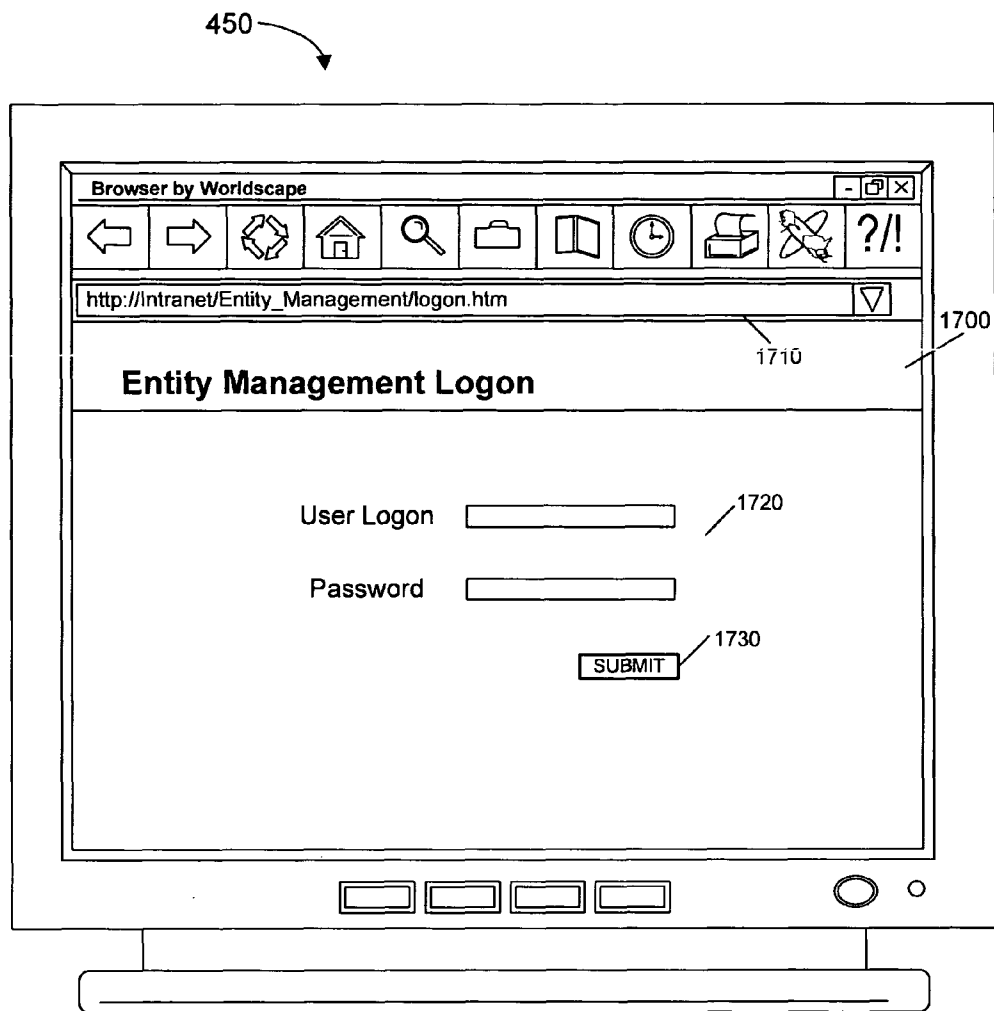


FIG. 17

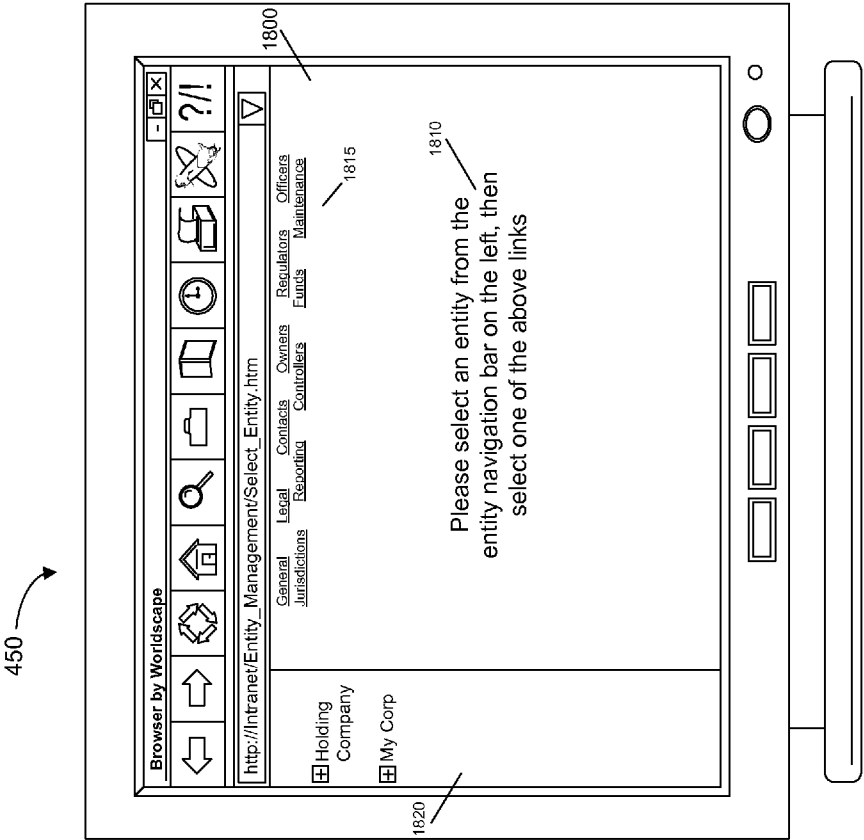


FIG. 18

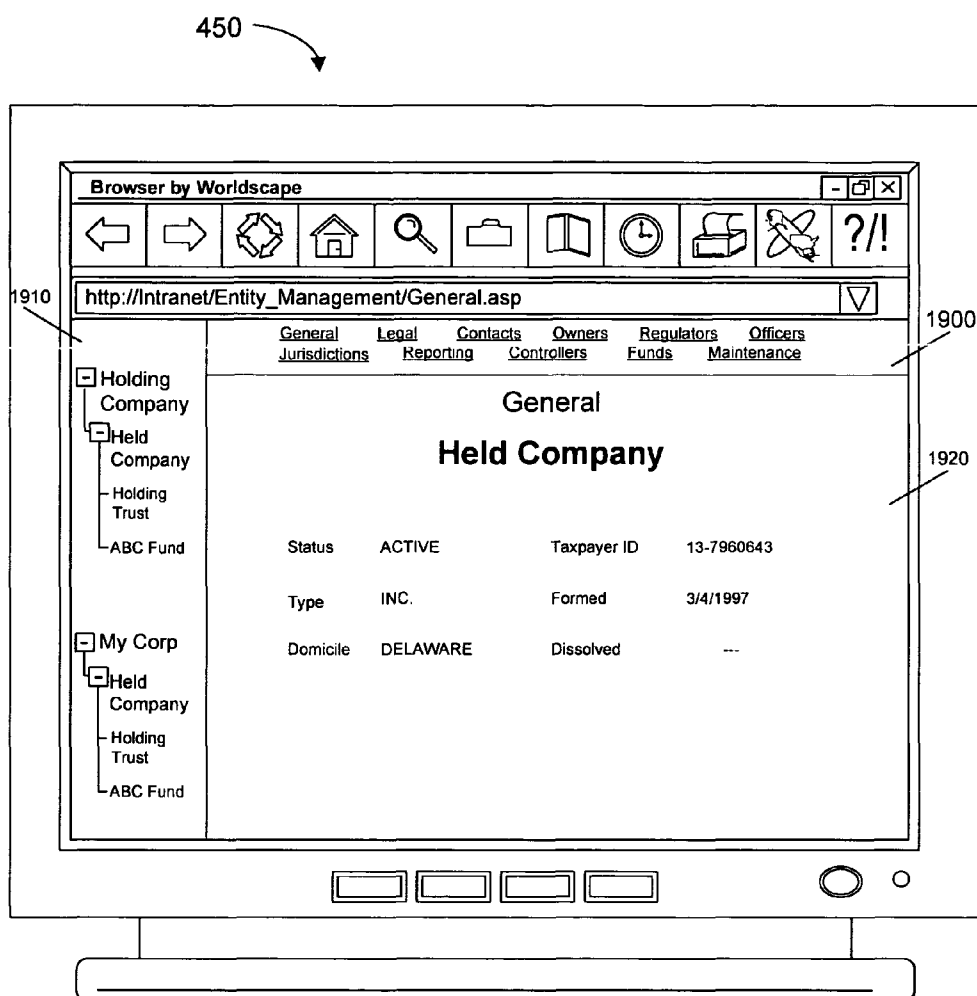
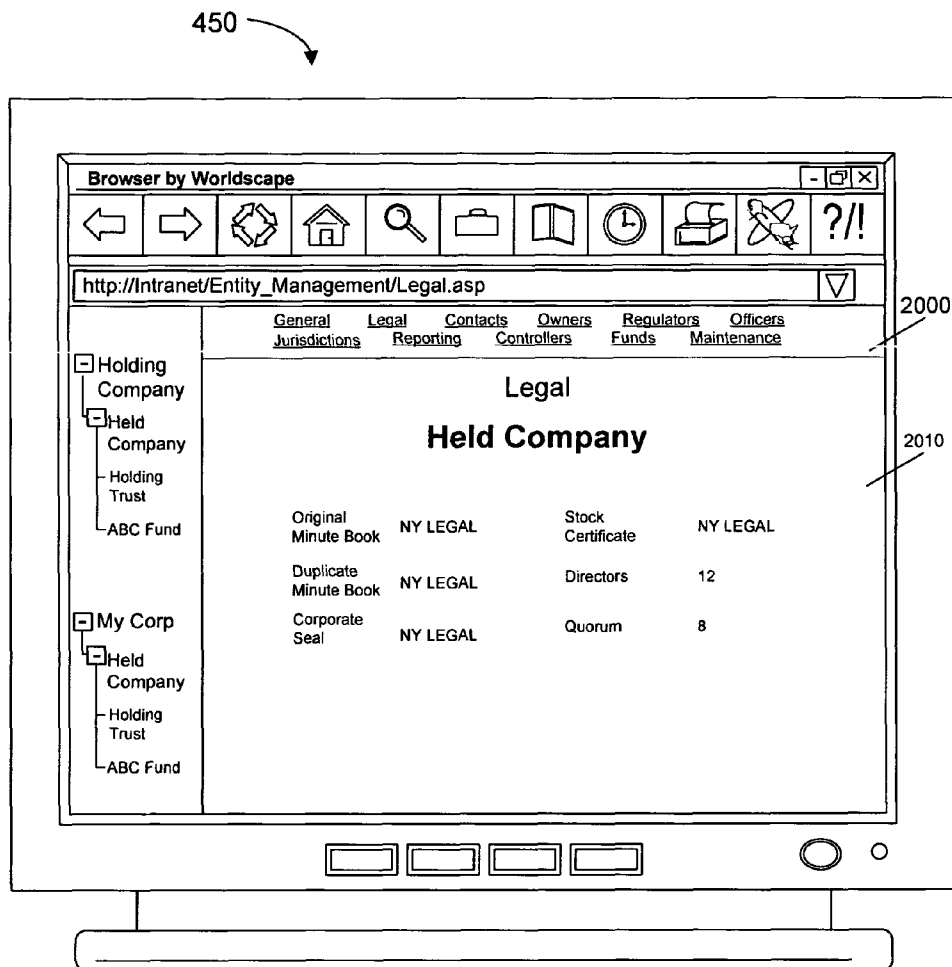


FIG. 19



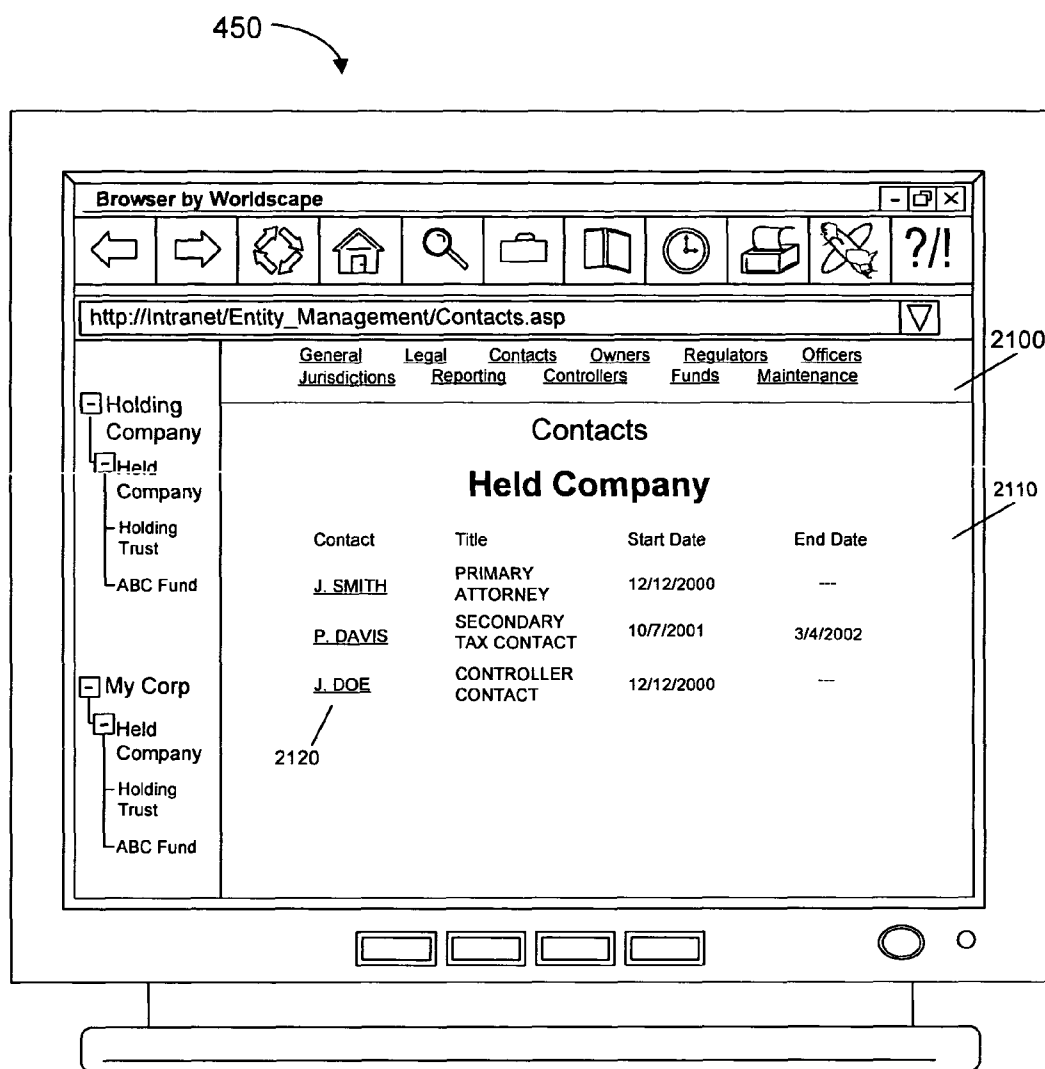


FIG. 21

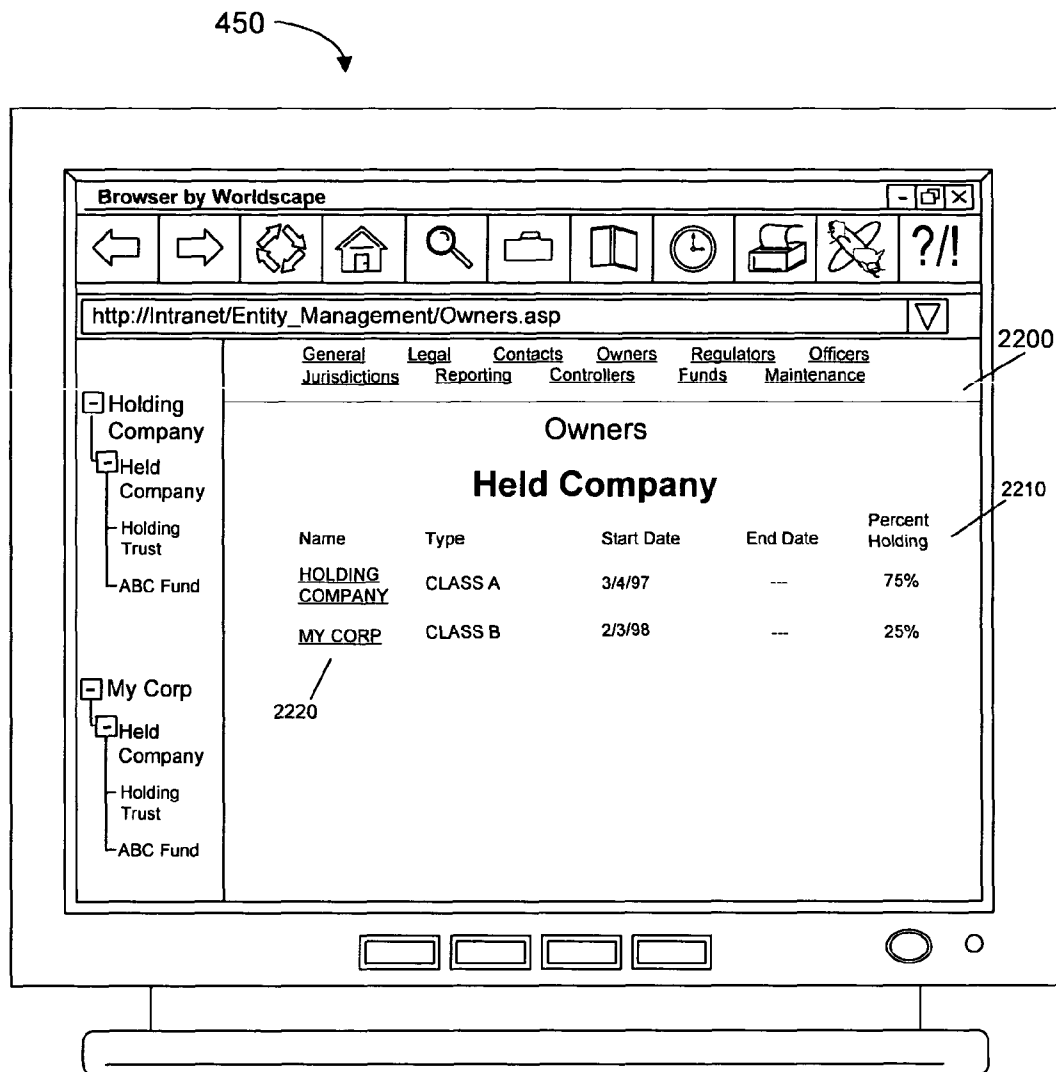
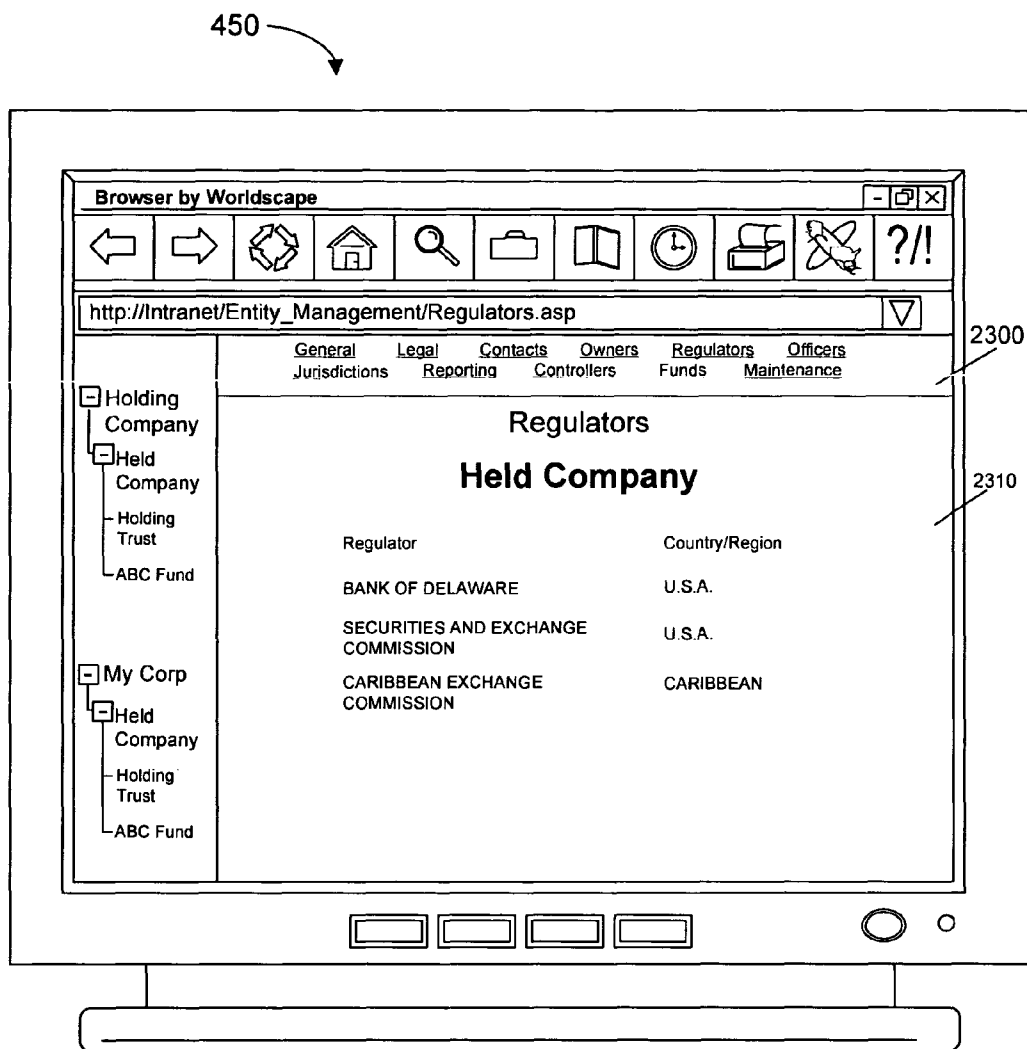


FIG. 22



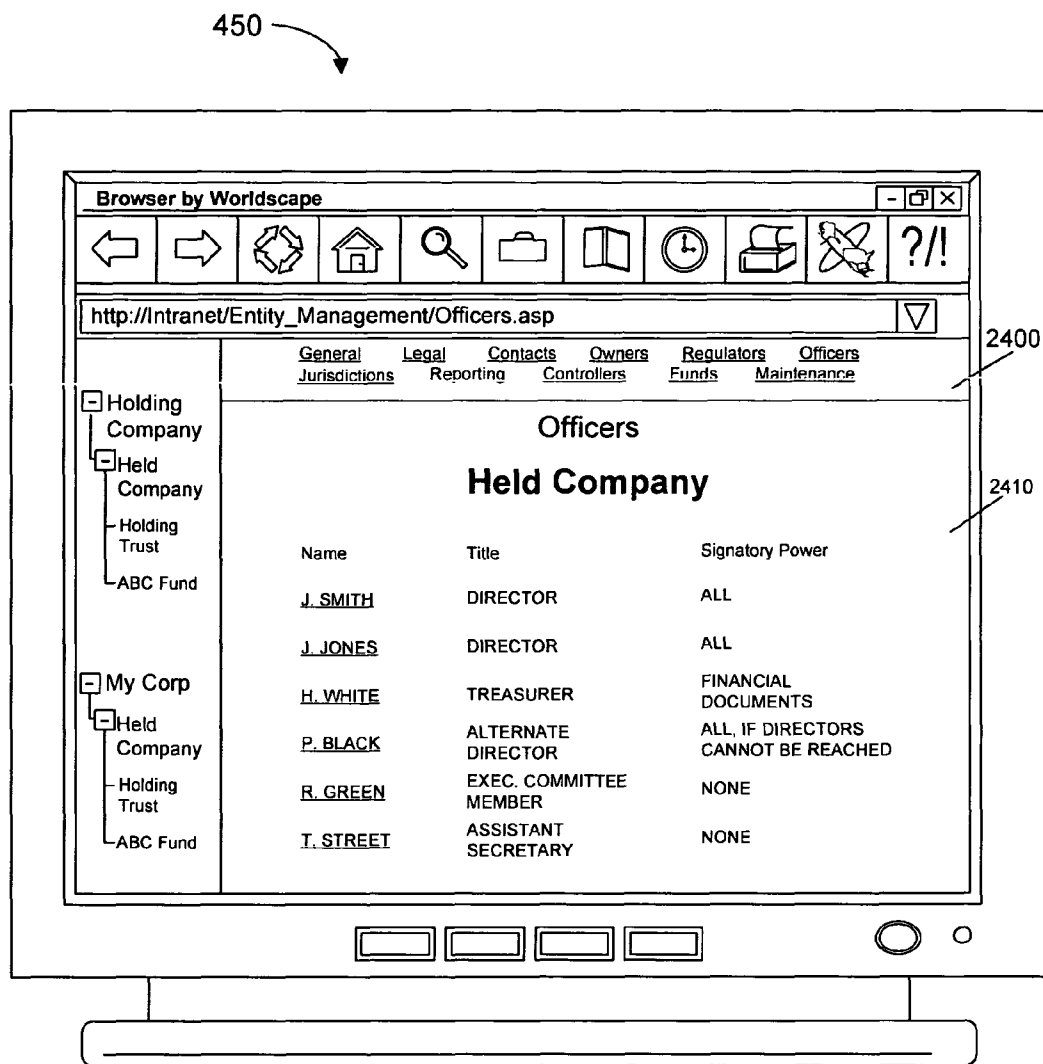


FIG. 24

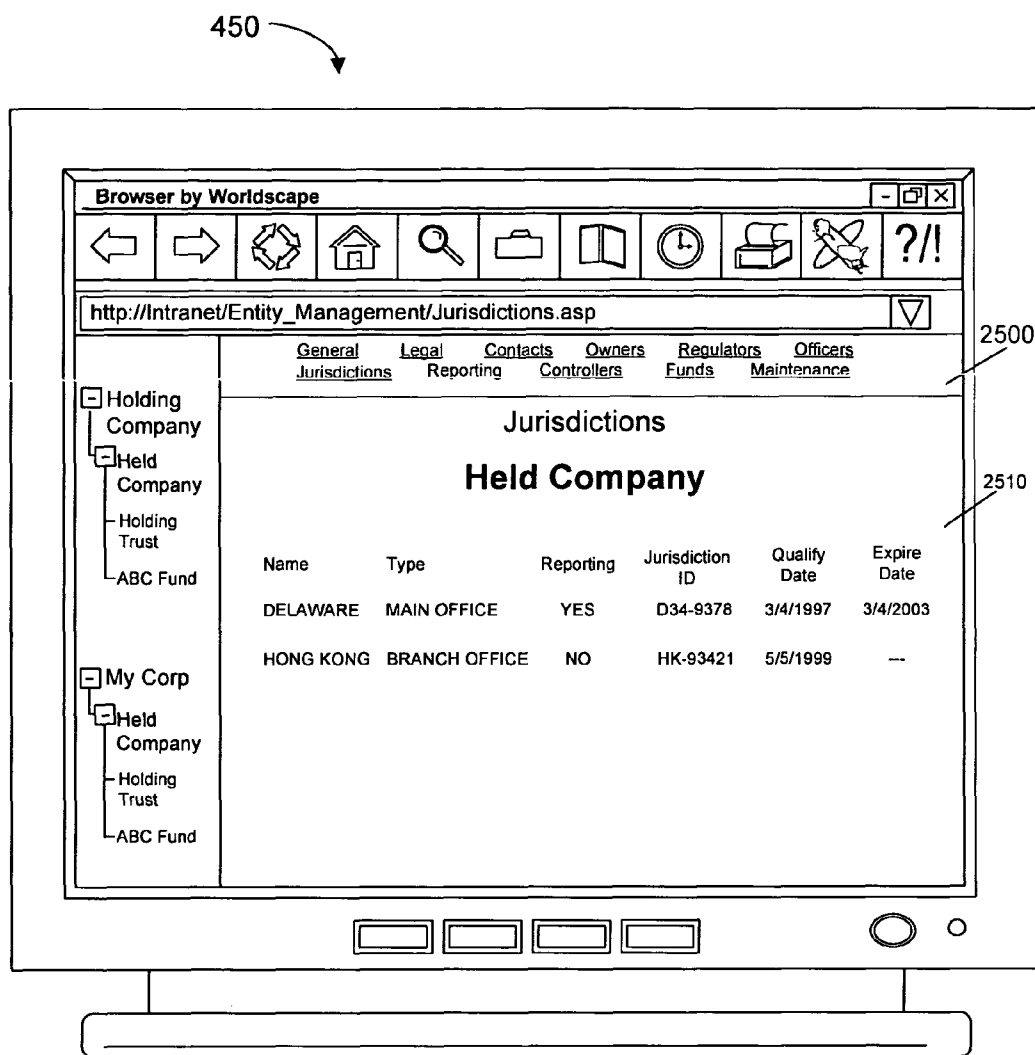
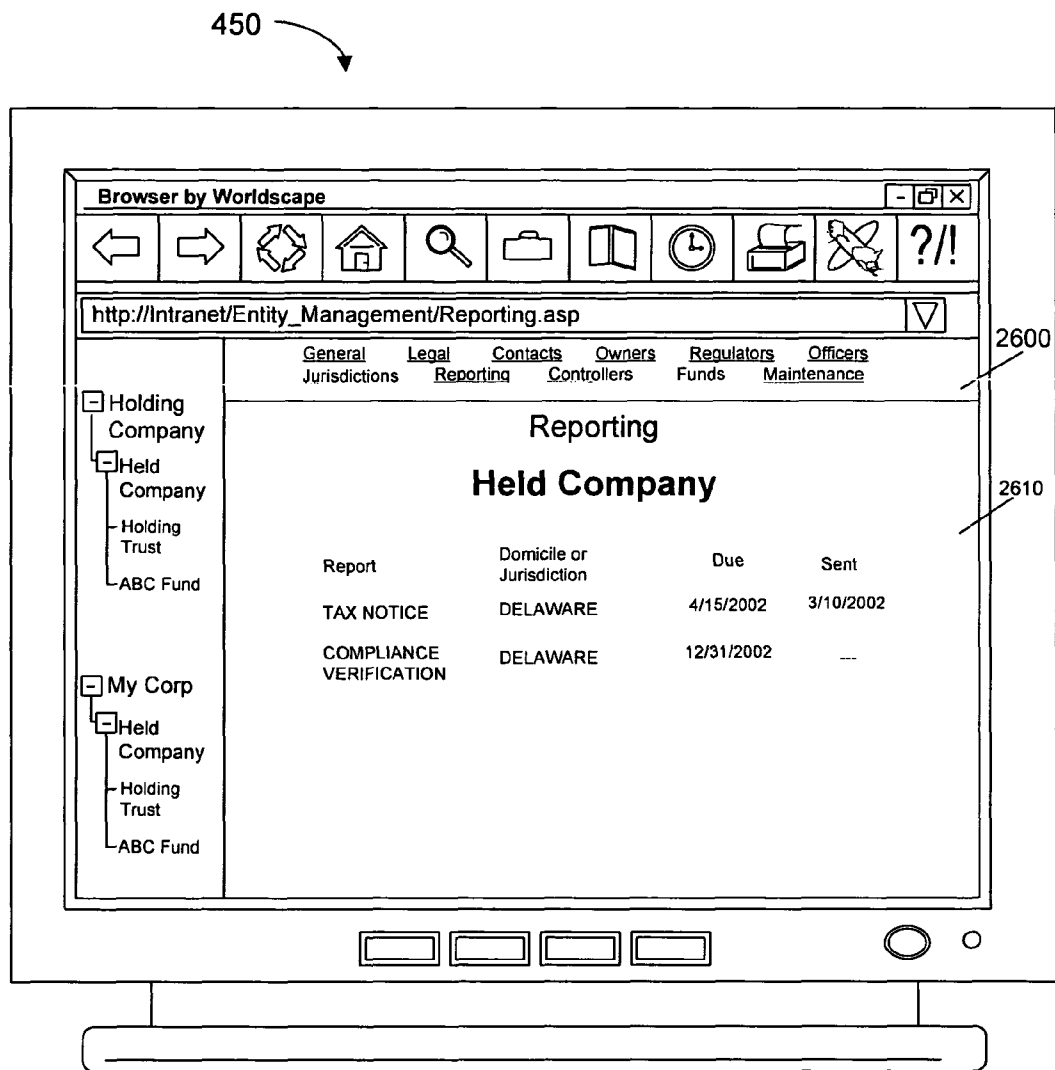


FIG. 25



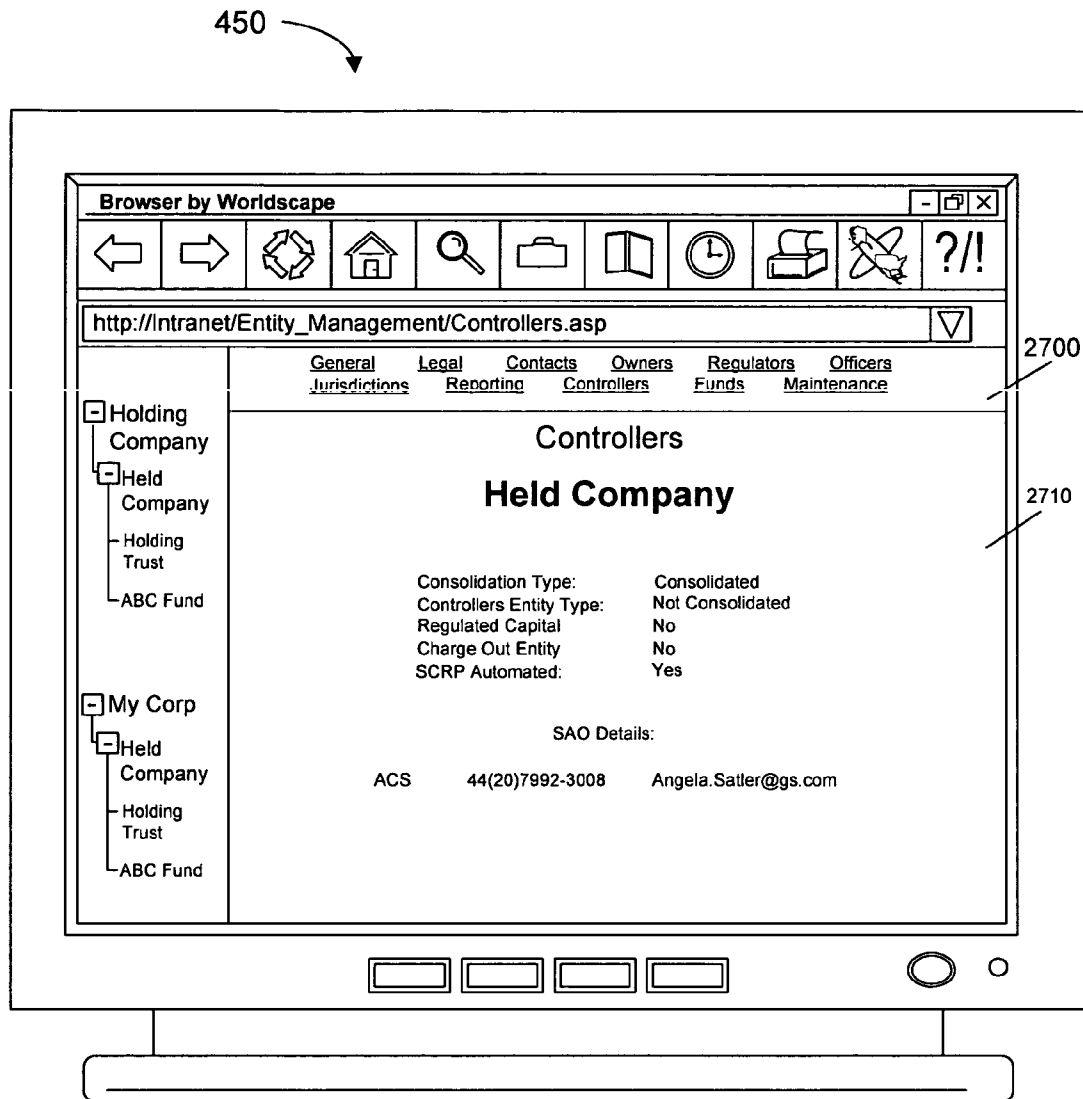


FIG. 27

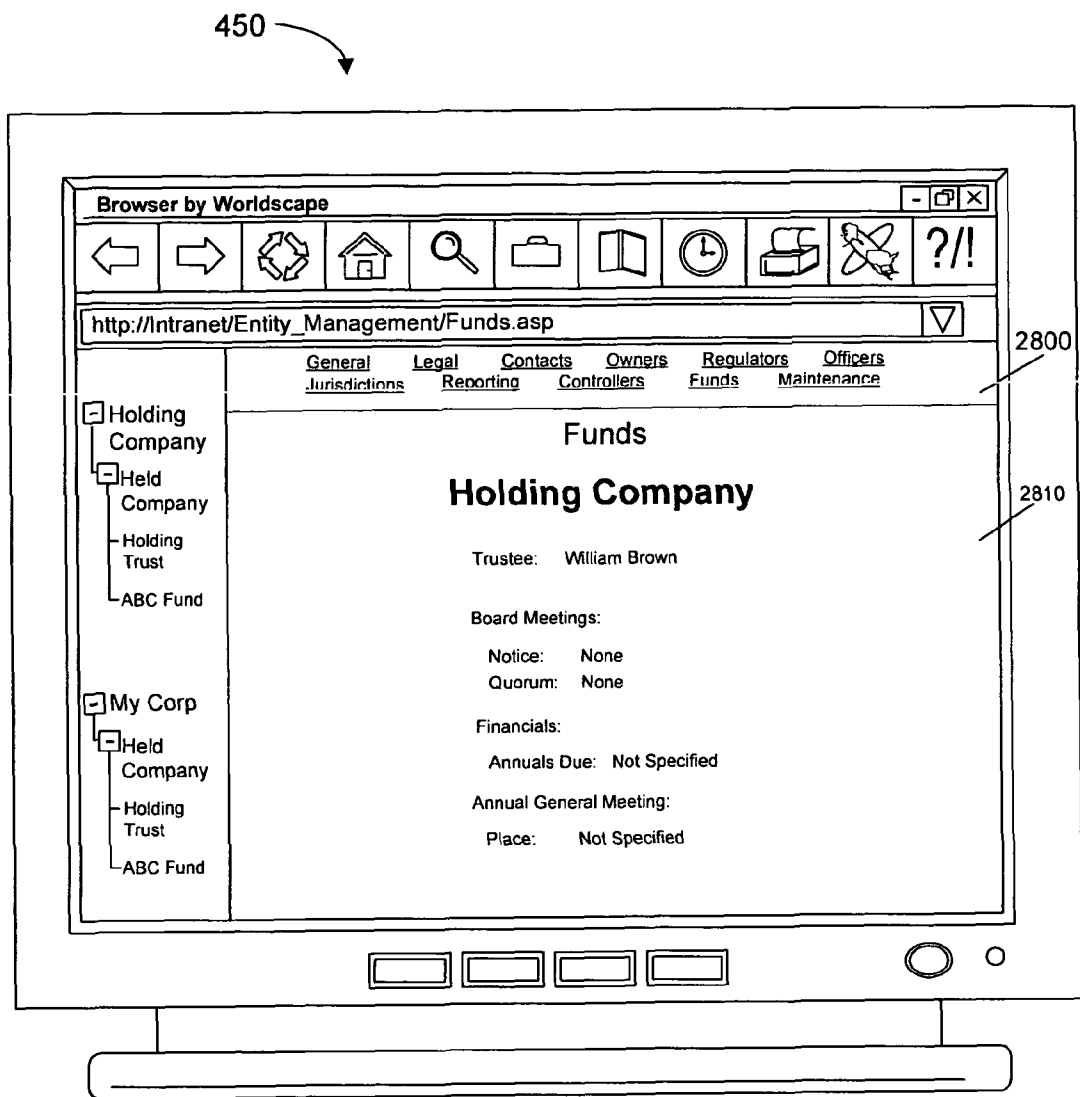


FIG. 28

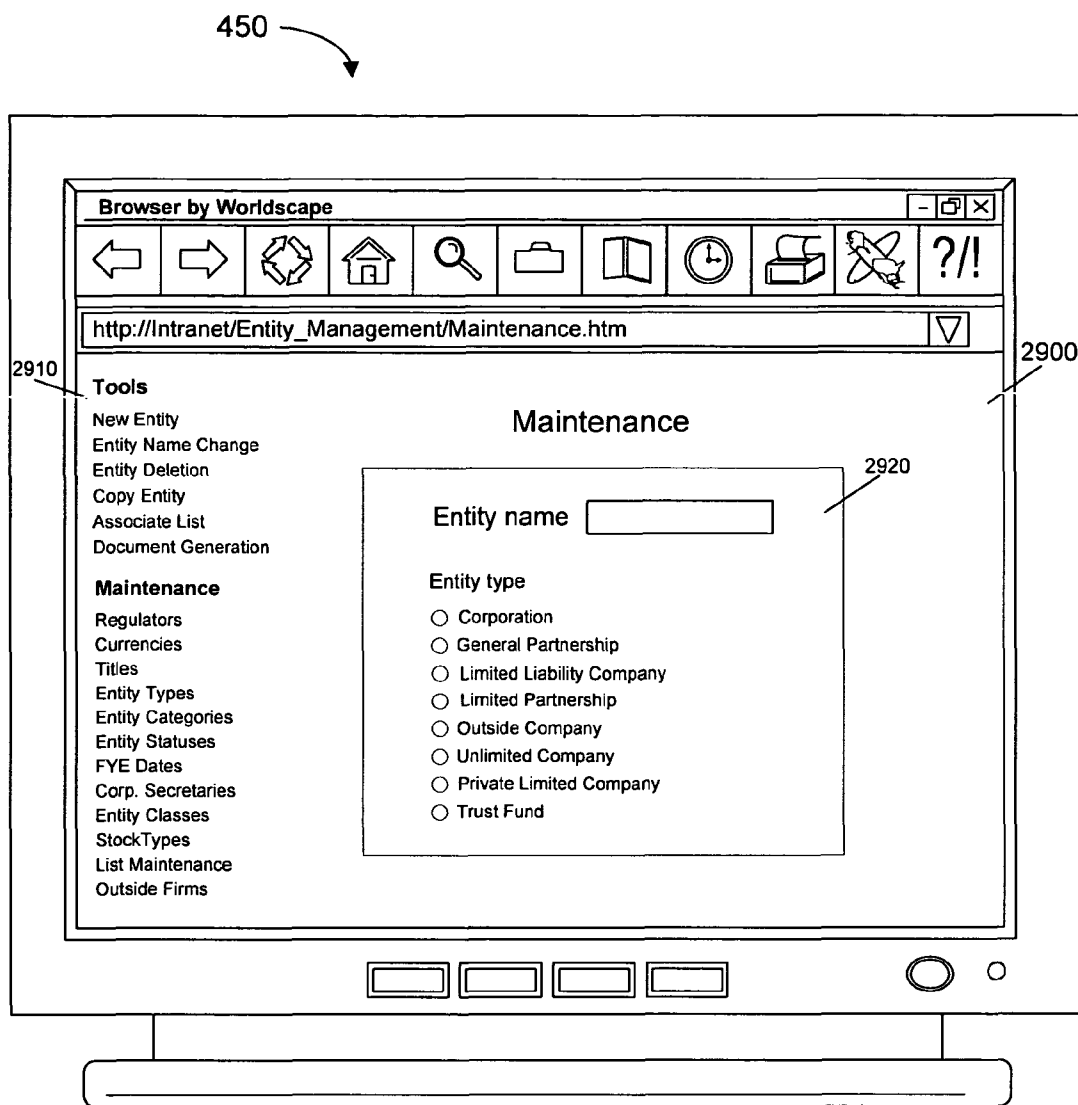


FIG. 29

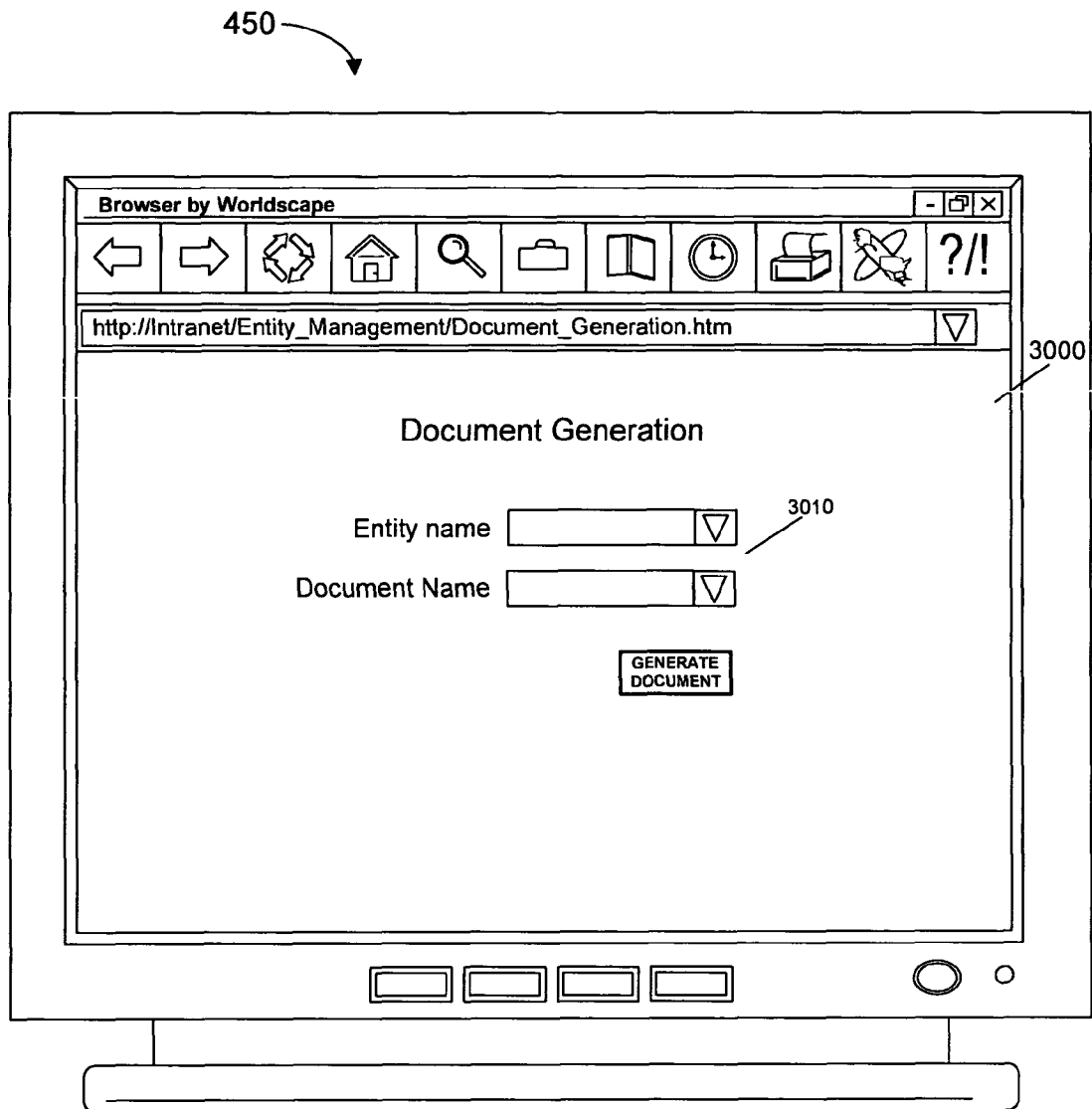


FIG. 30

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MANAGEMENT OF CORPORATE ENTITIES**CROSS REFERENCE TO RELATED APPLICATIONS**

This application claims priority to Provisional Application Ser. No. 60/401,285, filed Aug. 6, 2002 and entitled "Management of Corporate Entities".

FIELD

The present invention relates to the management of corporate entities. In particular, the present invention relates to efficient management of information relating to a plurality of interrelated and/or unrelated corporate entities.

BACKGROUND

Modern business transactions commonly involve several corporate entities. In a typical transaction, each involved corporate entity may be owned by several shareholders, one or more of which may be another of the involved entities. The entities may also have different corporate structures, reporting requirements and applicable laws that should be appropriately dealt with during the transaction. In order to prepare transaction documents and execute procedures that address each of these concerns, entity representatives are often required to track and manage officers, documents and other specific characteristics associated with each entity.

Specific characteristics of corporate entities come into play even outside the context of a particular transaction. In this regard, corporate "housekeeping" required by laws applicable to a particular entity includes activities such as electing officers, complying with tax and regulatory filing deadlines, and holding board meetings. Again, these activities require tracking of a myriad of details for each corporate entity.

Recently, computer databases have been employed to track information associated with corporate entities. According to these systems, tax-related information is tracked and accessed by an accounting department, while corporate structure information is tracked and accessed by a corporate department. Oftentimes the systems employed by each department are incompatible, thereby inhibiting transfer of information among departments. Even if information associated with several corporate entities were available in a centrally-accessible data depository, current systems are unable to present the data in a manner that facilitates efficient tracking, editing and/or use thereof.

In view of the foregoing, what is needed are improvements in the management of information associated with corporate entities. Such improvements may in turn enable efficient management of the associated corporate entities.

SUMMARY

To address the foregoing, embodiments of the present invention concern a system, a method, an apparatus, a computer-readable medium storing processor-executable process steps, and means to present a plurality of selectable elements and an entity selection area, the entity selection area allowing selection of at least one corporate entity from a plurality of corporate entities, receive a selection of the at least one corporate entity, receive a selection of one of the plurality of selectable elements, determine information associated with the at least one corporate entity and the one selected element, and present the determined information to a user.

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Embodiments of the present invention also provide a user interface which includes interface an entity selection area allowing selection of at least one corporate entity from a plurality of corporate entities, and a plurality of selectable elements, each of the selectable elements being selectable to cause presentation of an associated area, wherein an area associated with each of the plurality of selectable elements presents information relating to the at least one corporate entity and to the associated selectable element.

With these and other advantages and features of the invention that will become hereinafter apparent, the invention may be more clearly understood by reference to the following detailed description of the invention, the appended claims, and the drawings attached hereto.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a topographic view of a network architecture according to some embodiments of the present invention.

FIG. 2 is a block diagram of an internal architecture of an entity management server according to some embodiments to the present invention.

FIG. 3 is a block diagram of an internal architecture of a corporate entity server according to some embodiments to the present invention.

FIG. 4 is a block diagram of an internal architecture of a user device according to some embodiments to the present invention.

FIG. 5 is a representative view of a tabular portion of an entity relationship database according to some embodiments of the present invention.

FIG. 6 is a representative view of a tabular portion of a general information database according to some embodiments of the present invention.

FIG. 7 is a representative view of a tabular portion of a legal database according to some embodiments of the present invention.

FIG. 8 is a representative view of a tabular portion of a contacts database according to some embodiments of the present invention.

FIG. 9 is a representative view of a tabular portion of an owners database according to some embodiments of the present invention.

FIG. 10 is a representative view of a tabular portion of a regulators database according to some embodiments of the present invention.

FIG. 11 is a representative view of a tabular portion of an officers database according to some embodiments of the present invention.

FIG. 12 is a representative view of a tabular portion of a jurisdictions database according to some embodiments of the present invention.

FIG. 13 is a representative view of a tabular portion of a reporting database according to some embodiments of the present invention.

FIG. 14 is a representative view of a tabular portion of a controllers database according to some embodiments of the present invention.

FIG. 15 is a representative view of a tabular portion of a funds database according to some embodiments of the present invention.

FIG. 16 is a representative view of a tabular portion of a document generation database according to some embodiments of the present invention.

FIG. 17 is a representative view of an interface according to some embodiments of the present invention.

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FIG. 18 is a representative view of an interface according to some embodiments of the present invention.

FIG. 19 is a representative view of an interface according to some embodiments of the present invention.

FIG. 20 is a representative view of an interface according to some embodiments of the present invention.

FIG. 21 is a representative view of an interface according to some embodiments of the present invention.

FIG. 22 is a representative view of an interface according to some embodiments of the present invention.

FIG. 23 is a representative view of an interface according to some embodiments of the present invention.

FIG. 24 is a representative view of an interface according to some embodiments of the present invention.

FIG. 25 is a representative view of an interface according to some embodiments of the present invention.

FIG. 26 is a representative view of an interface according to some embodiments of the present invention.

FIG. 27 is a representative view of an interface according to some embodiments of the present invention.

FIG. 28 is a representative view of an interface according to some embodiments of the present invention.

FIG. 29 is a representative view of an interface according to some embodiments of the present invention.

FIG. 30 is a representative view of an interface according to some embodiments of the present invention.

DETAILED DESCRIPTION

System Architecture

FIG. 1 illustrates a network architecture of a system according to some embodiments of the present invention. As shown, communication network 100 provides communication between entity management server 200, entity servers 300, 310 and 320, and user devices 400 and 410.

Communication network 100 may comprise any number of different systems for transferring data, including a Local Area Network (LAN), a Metropolitan Area Network (MAN), a Wide Area Network (WAN), a proprietary network, a Public Switched Telephone Network (PSTN), a Wireless Application Protocol (WAP) network, a wireless LAN (e.g., in accordance with the Institute of Electrical and Electronics Engineers 802.11 standard), a Bluetooth network, an Infrared Radiation (IR) network, and/or an IP network such as the Internet, an intranet or an extranet. As used herein, the term "communication" can refer to wired and/or wireless communication as appropriate.

Entity management server 200 is used to provide an interface to facilitate the management of corporate entities in accordance with some embodiments of the invention. As will be described in detail below, such an interface may be provided through presentation of a plurality of selectable elements and an entity selection area, the entity selection area allowing selection of at least one corporate entity from a plurality of corporate entities, receive a selection of the at least one corporate entity, reception of a selection of one of the plurality of selectable elements, determination of information associated with the at least one corporate entity and the one selected element, and presentation of the determined information to a user.

In one specific example, entity management server 200 receives information associated with corporate entities from many different sources such as entity servers 300, 310 and 320 and stores the information in appropriate databases of server 200. Entity management server 200 then receives a request for information from one of user devices 400 and 410. The requested information is retrieved from the databases of

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entity management server 200 and used to create an interface according to some embodiments of the invention. The interface is presented to the user device from which the request was received, and the user device in turn presents the interface to a user. This and other specific examples are discussed in more detail below.

Entity management server 200 is depicted as a mainframe server in FIG. 1, but may comprise any device or devices capable of performing process steps attributed to server 200 herein. Moreover, entity management server 200 may provide entity management services to more than one managing entities. Other services may also be provided by entity management server 200, including functions usable by disparate companies, departments, and/or offices. In this regard, entity management server 200 may be operated by a company in order to manage corporate entities related to the company, or by a company providing this management as an outsourced function.

Entity servers 300, 310 and 320 store information relating to corporate entities. Each of servers 300, 310 and 320 may store information relating to a single respective entity, and one or more of servers 300, 310 and 320 may store information relating to two or more entities. In the former case, entity servers 300, 310 and 320 may comprise central data repositories maintained by their respective entities. The information stored in entity servers 300, 310 and 320 may therefore be generated by business activities of the respective entities. The information may also be input by an operator having authorization to input information. As shown, entity server 300 also functions as a network server for serving applications and data to terminals 302 through 308.

User devices 400 and 410 comprise a personal computer and a personal digital assistant, respectively. User devices 400 and 410 are capable of communicating with entity management server 200 over communication network 100, and of presenting an interface to a user in operation thereof. In some embodiments, such an interface includes an entity selection area allowing selection of at least one corporate entity from a plurality of corporate entities, and a plurality of selectable elements, each of the selectable elements being selectable to cause presentation of an associated area, wherein an area associated with each of the plurality of selectable elements presents information relating to the at least one corporate entity and to the associated selectable element.

In other embodiments, the devices of FIG. 1 are connected differently than as shown. For example, some or all of the devices may be connected directly to one another. Of course, embodiments of the invention may include devices that are different from those shown. It should also be noted that although the devices are shown in communication with each other, the devices need not be constantly exchanging data. Rather, communication may be established when necessary and severed at other times or always available but rarely used to transmit data. Moreover, although the illustrated communication links appear dedicated, it should be noted that each of the links may be shared by other devices.

Entity Management Server

FIG. 2 is a block diagram of an internal architecture of entity management server 200 according to some embodiments of the invention. As illustrated, entity management server 200 includes microprocessors 210 in communication with communication bus 220. Microprocessors 210 may comprise RISC-based and other types of processors and are used to execute processor-executable process steps so as to control the elements of entity management server 200 to provide desired functionality.

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Also in communication with communication bus **220** is communication port **230**. Communication port **230** is used to transmit data to and to receive data from devices external to entity management server **200** such as devices **300** through **510**. Communication port **230** is therefore preferably configured with hardware suitable to physically interface with desired external devices and/or network connections. For example, communication port **230** may comprise an Ethernet connection to a local area network through which entity management server **200** may receive and transmit information over the Web.

Input device **240**, display **250** and printer **260** are also in communication with communication bus **220**. Any known input device may comprise input device **240**, including a keyboard, mouse, touch pad, voice-recognition system, or any combination of these devices. Of course, information may also be input to entity management server **200** from other devices via communication port **230**. Display **250** may be an integral or separate CRT display, flat-panel display or the like used to display graphics and text in response to commands issued by microprocessors **210**. Printer **260** may also present text and graphics to an operator, but in hardcopy form using ink-jet, thermal, dot-matrix, laser, or other printing technologies. Elements **240** through **260** are most likely used sparingly during operation of entity management server **200**, but may be used by an operator for setup and administration.

RAM **265** is connected to communication bus **220** to provide microprocessors **210** with fast data storage and retrieval. In this regard, processor-executable process steps being executed by microprocessors **210** are typically stored temporarily in RAM **265** and executed therefrom by microprocessors **210**. ROM **270**, in contrast, provides storage from which data can be retrieved but to which data cannot be stored. Accordingly, ROM **270** is used to store invariant process steps and other data, such as basic input/output instructions and data used during boot-up of entity management server **200** or to control communication port **230**. It should be noted that one or both of RAM **265** and ROM **270** may communicate directly with microprocessors **210** instead of over communication bus **220**.

Data storage device **280** stores, among other data, processor-executable process steps of entity management application **281**. Microprocessors **210** therefore execute the process steps of entity management application **281** in order to control entity management server **200** to facilitate corporate entity management according to some embodiments of the present invention.

The process steps of entity management application **281** may be read from a computer-readable medium, such as a floppy disk, a CD-ROM, a DVD-ROM, a Zip™ disk, a magnetic tape, or a signal encoding the process steps, and then stored in data storage device **280** in a compressed, uncompressed and/or encrypted format. In alternative embodiments, hard-wired circuitry may be used in place of, or in combination with, processor-executable process steps for implementation of processes according to embodiments of the present invention. Thus, embodiments of the present invention are not limited to any specific combination of hardware and software.

Process steps of Web server **282** are also stored in data storage device **280**. These process steps may be executed by microprocessors **210** to transmit data to and to receive data from Web clients, such as Web browsers, over the Web. The data may include information from entity servers **300**, **310** and **320**, requests for information from user devices **400** and **410**, and interfaces facilitating the management of corporate entities according to some embodiments of the present invention.

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Entity relationship database **283** of data storage device **280** specifies relationships between corporate entities managed according to the present embodiment. In some embodiments, the specified relationships indicate that a certain entity is downstream of another entity, for example in a case that the certain entity is a subsidiary of the another entity. In another example, a parent company is indicated as being an upstream entity to its child companies. The information stored in entity relationship database **283** is used in some embodiments to create an interface including an entity selection area that allows selection of at least one corporate entity from a plurality of corporate entities.

Data storage device **280** also stores several other databases according to some embodiments of the present invention. Specifically, general database **284** stores information relating to the formation of a plurality of entities, while legal database **285** includes data indicating legally-related information such as locations of legal documents and the like. Contacts database **286** and owners database **287** respectively provide information regarding individuals having some relation to a plurality of corporate entities, and information identifying owners and ownership details of a plurality of corporate entities. Regulators database **288** identifies regulatory entities associated with corporate entities, and officers database **289** specifies officers of corporate entities managed according to embodiments of the present invention.

Jurisdictions database **290** includes information related to an entity's qualifications to do business in one or more jurisdictions, and reporting database **291** specifies reporting requirements applicable to one or more of the managed entities. Controllers database **292** and funds database **293** store information respectively relating to controllers of corporate entities and to funds controlled by the managed corporate entities. Document generation database **294** includes information usable to automatically generate documents including information specified in one or more of databases **283** through **293**. Such document generation provides increased efficiency over previous systems for preparing documents that include often hard-to-retrieve information relating to several corporate entities.

The information stored in databases **283** through **294** may be received from entity servers such as servers **300**, **310** and **320**, from an operator of entity management server **200**, or from another device. In some embodiments, the information is used to create an interface for managing corporate entities according to embodiments of the present invention.

Also stored in data storage device **280** may also be other unshown elements that may be necessary for operation of entity management server **200**, such as an operating system, a database management system, other applications, other data files, and "device drivers" for allowing microprocessors **210** to interface with devices in communication with communication port **230**. These elements are known to those skilled in the art, and are therefore not described in detail herein.

Entity Server

FIG. 3 is a block diagram of the internal components of entity server **300** according to some embodiments of the invention. It should be noted that these distinct components may comprise any of the specific examples given above with respect to identically-named components of entity management server **200**. Of course, specific functions performed by the components may differ from the functions performed by the identically-named components.

In operation, process steps of entity management client application **392** are executed by microprocessors **310** to collect and transfer information associated with one or more corporate entities to entity management server **200**. As men-

tioned above, the information may be collected over communication port 330 during normal business operations and/or through periodic querying of departmental or company-wide data repositories in communication with entity server 300. The information may also be input by an operator using input device 340 and display 350. The information is stored in entity information database 394, which may include information related to one or more corporate entities.

It should be noted that entity management client application 392 may include process steps usable to establish communication with and exchange data with entity management application 281. In this regard, entity server 300 may include any software and/or hardware suitable to perform the steps described herein.

User Device

FIG. 4 illustrates several components of user device 400 according to some embodiments of the invention. Again, the illustrated components may comprise any of the specific examples given above with respect to identically-named components of user administration server 200 and/or entity server 300. For example, communication port 430 may be used to transmit requests for information to entity management server 200. In this regard, input device 440 may be used in conjunction with display 450 to request and to present an interface according to some embodiments of the invention. Input device 440, display 450 and printer 460 may also be used in conjunction with other applications provided by user device 400 which are unrelated to the present invention.

Storage device 490 of user device 400 stores processor-executable process steps of Web client 492, such as a Web browser. The process steps may be executed by microprocessor 410 to allow communication with Web servers such as Web server 282 of entity management server 200. Authorization information database 494 includes information that may be transmitted to entity management server 200 and used thereby to determine whether a user of user device 400 is authorized to view some or all of an interface according to embodiments of the present invention.

Storage device 490 may store one or more of other applications, data files, device drivers and operating system files needed to provide functions other than those directly related to the present invention. Such functions may include calendaring, e-mail access, word processing, accounting, presentation development and the like.

Databases

A tabular representation of a portion of entity relationship database 283 is shown in FIG. 5. As described above, the information stored in entity relationship database 283 specifies relationships between corporate entities and may be used to construct an entity selection area of an interface according to some embodiments of the present invention. Entity relationship database 293 of FIG. 5 includes several records, each consisting of several fields. The fields include entity Id field 501, upstream entities field 502, and downstream entities field 503.

Entity Id field 501 includes an identifier that may be used throughout the databases described herein to identify a particular corporate entity. In particular, the identifier associated with a record of entity relationship database 283 identifies a corporate entity associated with data populating other fields of the record. The identifier may be assigned by entity management server 200 or may be received from another device.

Upstream entities field 502 includes identifiers of entities that are organizationally upstream from the subject entity, such as a parent company or partial owner of the subject entity. Downstream entities field 503 similarly includes identifiers of entities that are organizationally downstream from

the subject entity, such as a subsidiary or the like. As shown, a particular entity may be associated with multiple upstream and downstream entities.

The information stored in entity relationship database 283, as well as that stored in each other of the databases of entity management server 200, may be received from a variety of sources, including entity servers such as entity servers 300, 310 and 320, user devices such as user devices 400 and 410, an operator manually inputting the information using input device 240, and other devices.

FIG. 6 illustrates a tabular representation of a portion of general database 284. General database 284 stores information relating to the formation of a plurality of entities. Specifically, the fields of each record of database 284 include entity Id field 601, name field 602, type field 603, status field 604, domicile field 605, taxpayer Id field 606, formed field 607, and dissolved field 608. Entity Id field 601 of a record is used to identify an entity with which data of the record are associated. Name field 602, type field 603, status field 604, domicile field 605 and taxpayer Id field 606 specify respectively-named information for each record. Formed field 607 and dissolved field 608 indicate dates on which an associated entity was formed and dissolved, if ever.

A tabular representation of a portion of legal database 285 is shown in FIG. 7. Legal database 285 specifies legally-related information such as locations of legal documents and the like. The records of database 285 include entity id field 701, which identifies a particular corporate entity. Original minute book field 702, duplicate minute book field 703, corporate seal field 704 and stock certificate field 705 specify locations of the original minute book, duplicate minute book, corporate seal, and stock certificate of an associated entity. Directors field 706 indicates a number of directors and quorum field 707 specifies a number of directors required for a quorum under the rules of an associated entity.

The tabular portion of contacts database 286 illustrated in FIG. 8 stores information associated with individuals having some relation to a corporate entity. In particular, for each individual reflected in contacts database 286, a record specifies an entity with which the individual is associated in entity Id field 801, a name of the individual in contact field 802, the individual's title in title field 803, a start date associated with the individual in start date field 804, an associated end date in end date field 805, and information for contacting the individual in contact information field 806.

FIG. 9 illustrates a tabular representation of a portion of owners database 287. As shown, owners database 287 includes information identifying owners and ownership details of a plurality of corporate entities. In particular, each record of owners database 287 includes entity Id field 901, owner Id field 902, type field 903, start date field 904, end date field 905, and percent holding field 906.

Entity ID field 901 indicates an entity wholly or partially owned by an entity specified in associated owner Id field 902. Accordingly, a single entity having multiple owners may be the subject of multiple records of owners database 287. Type field 903 specifies the type of ownership relationship reflected in a record, while start date field 904 and end date field 905 respectively specify a start date and an end date of the ownership relationship. Percent holding field 906 of a record specifies a percent of the entity identified in entity Id field 901 of the record that is held by the entity identified in owner Id field 902 of the record.

FIG. 10 illustrates a tabular representation of a portion of regulators database 288. The portion includes several records, each including entity Id field 1001, regulator field 1002, and country/region field 1003. In each record, regulator field 1002

associates a regulator with a corporate entity identified in entity Id field **1001**. Country/region field specifies a geographical area in which the regulator possesses jurisdiction. Accordingly, regulatory requirements applicable to an entity may be determined based on the information populating regulators database **288**.

A representation of a tabular portion of officers database **289** is illustrated in FIG. **11**. Each record of officers database **289** associates information relating to a corporate officer with an entity of which the officer is an officer. More particularly, each record includes entity Id field **1101**, name field **1102**, title field **1103**, and signatory power field **1104**. The latter three fields specify a name, title and signatory power of an officer of the entity identifies by the former field.

FIG. **12** illustrates a tabular representation of a portion of jurisdictions database **290**. Jurisdictions database **290** stores information related to an entity's qualifications to do business in one or more jurisdictions. Specifically, the fields of each record of database **290** include entity Id field **1201**, qualified field **1202**, type field **1203**, reporting field **1204**, jurisdiction Id field **1205**, qualify date field **1206**, and expire field **1207**. Entity Id field **1201** identifies a subject entity, while qualified field **1202** specifies a jurisdiction in which the entity is qualified to do business. Type field **1203** and reporting field **1204** identify the type of presence the entity has in the jurisdiction, and whether the jurisdiction requires any type of reporting. Jurisdiction Id field **1205** includes an identifier used by the jurisdiction to identify the entity, and may comprise a taxpayer identifier or the like. Qualify date **1206** and expire date **1207** respectively indicate a date on which the entity became qualified to do business in the jurisdiction, and a date on which the qualification will expire.

A tabular representation of a portion of reporting database **291** is shown in FIG. **13**. Reporting database **291** specifies information relating to the reporting requirements applicable to particular corporate entities. These requirements may be mandatory, optional, or otherwise applicable. The records of database **291** include entity id field **1301**, which identifies a particular corporate entity. Report field **1302** specifies a report that is the subject of the record, and domicile/jurisdiction field **1303** identifies the domicile and/or jurisdiction for which the report is required. Due field **1304** and sent field **1305** respectively identify dates on which the subject report is due and was sent. Although database **291** as illustrated in FIG. **13** shows reports associated with a single corporate entity, it should be noted that database **291** may describe reports associated with a plurality of entities.

FIG. **14** illustrates a tabular representation of a portion of controllers database **292**. Controllers database **292** stores information related to an entity's financial controllers. The fields of each record of database **292** include entity Id field **1401**, consolidation type field **1402**, controllers entity type field **1403**, SAO Id field **1404**, SAO contact information field **1405**, and SCRP automated flag **1406**.

A tabular representation of a portion of funds database **293** is shown in FIG. **15**. Funds database **293** specifies information relating to the funds associated with particular corporate entities. The records of database **293** include entity Id field **1501**, which identifies a particular corporate entity. Trustee field **1502** names a trustee, while board notice field **1503** and board quorum field **1504** provide information for convening an associated board. Annuals due field **1505** specifies when annual information associated with the funds are due.

FIG. **16** illustrates a tabular representation of a portion of document generation database **294**. The portion includes several records, each including document Id field **1601**, document name field **1602**, and document template field **1603**. In

each record, document name field **1602** associates a document name with a document Id specified in document Id field **1601**. Document template field **1603** specifies a location of an electronic file including a document template. Accordingly, document generation database **294** includes information usable to automatically generate documents including information specified in one or more of databases **283** through **293**.

It should be noted that the illustrations and accompanying descriptions of databases included herein merely represent relationships between stored information. A number of other arrangements may be employed besides those suggested, including arrangements in which some or all of the specified data is located remote from the device with which it is associated herein. It is further contemplated that each of the databases may include many more records than those shown and that each record may include associated fields other than those illustrated.

Interface

FIG. **17** illustrates an outward view of user interface **1700** as presented by display **450** of user device **400**. According to some embodiments, a user operates input device **440** of user device **400** to input a Uniform Resource Locator (URL) into address bar **1710** of a window presented according to process steps of Web client **492**. The process steps are executed to transmit a request for a Web page corresponding to the URL to Web server **282** of entity management server **200**, and to receive the Web page therefrom.

In the present example, interface **1700** is the Web page received from entity management server **200**. Interface **1700** includes input area **1720** for receiving logon information from the user, and Submit button **1730** for submitting the logon information to entity management server **200**. Upon receiving the logon information, entity management application **281** determines whether the user is authorized to access interfaces according to some embodiments of the present invention. In this regard, authorization information **494** may also or alternatively be submitted to determine a user's authorization.

If the user is authorized to view information provided by the present example, entity selection interface **1800** is presented to user device **400** and in turn presented to the user via display **450**. Interface **1800** includes instructions **1810**, interface links **1815** and entity selection area **1820**. Instructions **1810** instruct the user to select an entity from entity selection area **1820** and to select one of links **1815** to view corresponding information relating to the selected entity. As shown, the entities presented in entity selection area **1820** are associated with an icon indicating that downstream entities are associated with each entity. In this regard, information stored in entity relationship database may be used to construct selection area **1820**.

FIG. **19** illustrates user interface **1900**, which is presented after the user selects the icons associated with the entities of entity selection area **1820**, selects an entity from the resulting expanded tree structure, and selects the General link of links **1815**. The expanded tree structure is shown in entity selection area **1910**, and conforms to the information stored in entity relationship database **283**. Main area **1920** presents information associated with the selected entity in general database **284**. The user may select another entity from entity selection area **1910** to view information associated with the another entity in database **284**, or may select another link to view other information associated with the originally-selected entity.

Interface **2000** is presented upon selection of the Legal link. Main area **2010** of interface **2000** presents information that is associated with the selected entity in legal database

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285. Similarly, FIG. 21 shows that main area 2110 of interface 2100 presents contact information associated with the selected entity in contacts database 296. As also shown, contact names 2120 comprise hyperlinks that may be selected to view contact information associated with each contact name in database 296.

FIG. 22 illustrates interface 2200 as presented upon selection of the Owners link. Area 2210 of interface 2200 presents information associated with the selected entity in owners database 287. Like area 2110, area 2210 includes hyperlinks 2220 that may be selected to view information associated with the presented owners. Regulators interface 2300 of FIG. 23 presents, in area 2310, information stored in regulators database 288 that is associated with the selected entity in regulators database 288.

Information associated with the selected entity in officers database 289 is presented through user interface 2400 of FIG. 24. More specifically, area 2410 presents names, titles, and descriptions of signatory power for entity directors. Each name comprises a hyperlink that is selectable to view further information associated with the named officer. FIG. 25 shows the information of jurisdictions database 290 as reflected in area 2510 of interface 2500. Accordingly, interface 2500 is presented in response to user selection of the Jurisdictions link.

Selection of the Reporting link causes presentation of interface 2600. As shown in FIG. 26, area 2610 of interface 2600 presents information associated with the selected entity in reporting database 291. FIG. 27 shows interface 2700, which is presented in response to selection of the Controllers link. Area 2710 of interface 2700 presents information stored in controllers database 292. Similarly, FIG. 28 shows interface 2800 and area 2810, which are presented in response to selection of the Funds link. Accordingly, area 2810 presents information stored in funds database 293.

FIG. 29 shows display 450 presenting interface 2900. Interface 2900 is presented in response to user selection of the Maintenance link from any of the interfaces of FIGS. 18 through 28. Interface 2900 includes menu 2910 of Tools and Maintenance options. Any of these options may be selected in order to perform the task specified by the selected option. According to FIG. 29, the New Entity option has been selected and therefore main area 2920 includes an interface for defining a new entity.

Interface 3000 of FIG. 30 is presented in response to user selection of the Document Generation option from menu 2910. Interface 3000 may be used to generate documents relating to one or more corporate entities. According to the illustrated embodiment, an entity and a document are selected using pull-down menus located in main area 3010. In this regard, the pull-down menus may be populated, respectively, by information stored in general database 284 and document generation database 294.

By virtue of one or more of the foregoing features, some embodiments of the present invention provide an efficient interface for management of information related to corporate entities. It should be noted that the user interfaces of FIGS. 17 through 30 may be considered a single user interface. Moreover, a user interface according to embodiments of the present invention may be arranged differently than as shown, with all or some of the features of user interfaces 1700 through 3000 located within one or more user interfaces.

One or more of the interfaces described herein may include areas that allow editing of the information presented therein. Editing may be allowed based on editing rights of a user to whom the interface is presented, with several editing authority levels being available. In some embodiments, such editing

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causes editing of corresponding information stored in one or more of databases 283 through 294. Also in some embodiments, edited information may be associated with information indicating who edited the information and a date on which the information was edited. Furthermore, an interface according to some embodiments of the invention may present indications to a user that information presented therein is in the process of being edited by another user.

As mentioned above, each of databases 283 through 294 may contain information other than that explicitly mentioned herein. Accordingly, each of interfaces 1700 through 3000 may also present information other than that described herein. In one example, one or more of the interfaces may include links selectable to cause presentation of an area presenting images of documents relating to the at least one corporate entity. In another example, officers database 289 and interface 2400 track outside directorships held by each presented officer. The databases and interfaces related to reporting requirements may also provide a filing calendar that may be searched or organized by factors such as due date, entity, responsible division, responsible person, and regulatory body.

In some embodiments, entity management server 200 may be integrated with other devices operated by an entity maintaining server 200. In addition, many of the embodiments described herein are directed to the financial services and securities-related entities. However, embodiments of the present invention are applicable to many types of entities that are related to many types of businesses.

The present invention has been described in terms of several embodiments solely for the purpose of illustration. Persons skilled in the art will recognize from this description that the invention is not limited to the embodiments described, but may be practiced with modifications and alterations limited only by the spirit and scope of the appended claims.

What is claimed is:

1. A processor-implemented method comprising:

generating a user interface including a plurality of user selectable corporate entities and a user selectable corporate information category tab;

receiving a user selection of a corporate entity via the user interface;

retrieving via a processor, corporate information of corporate entity, wherein the corporate information includes at least ownership information, legal documents information and contact information relating to each corporate entity;

determining a plurality of corporate entities having ownership relationships with the user selected corporate entity based on the retrieved corporate information;

presenting a tiered selectable corporate ownership structure including the determined plurality of corporate entities showing ownership relationships and the user selectable corporate information category tab based on the retrieved corporate information,

wherein a first one of the plurality of corporate entities is at least a partial owner of a second one of the plurality of corporate entities and is graphically presented as being organizationally upstream from the second one of the plurality of corporate entities,

wherein a third one of the plurality of corporate entities is at least partial owned by a fourth one of the plurality of entities and is graphically presented as being organizationally downstream from the fourth one of the plurality of entities, and

wherein each of the plurality of corporate entities is shareholder-owned;

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receiving a selection of the second corporate entity;
 receiving a selection of the user selectable corporate information category tab;
 retrieving a category of corporate information corresponding to the one selected corporate information category tab and relating to the selected second corporate entity based on the retrieved corporate information; and
 presenting the retrieved information to a user.

2. A method according to claim 1, wherein the determined information comprises one or more of:

- information relating to a formation of the second corporate entity;
- a location of corporate documents relating to the second corporate entity;
- contact information relating to the second corporate entity;
- ownership information relating to the second corporate entity;
- information relating to regulators of the second corporate entity;
- information relating to officers of the second corporate entity;
- information relating to jurisdictions in which the second corporate entity is qualified to do business;
- information relating to reports filed or to be filed on behalf of the second corporate entity;
- controllers information relating to the second corporate entity; and
- funds information relating to the second corporate entity.

3. A method according to claim 1, further comprising:

- receiving instructions to generate a document including document information relating to the selected second corporate entity;
- determining the document information;
- generating the document; and
- presenting the document to the user.

4. A method according to claim 1, further comprising:

- receiving instructions to edit the determined information;
- determining whether the user is authorized to edit the determined information; and
- editing the determined information if it is determined that the user is authorized to edit the determined information.

5. A method according to claim 4, further comprising:

- associating information identifying the user with the edited information.

6. A method according to claim 4, further comprising:

- presenting an indication that the determined information is in the process of being edited.

7. A method according to claim 1, further comprising:

- associating information identifying a date on which the information was edited with the edited information.

8. A method according to claim 1, further comprising:

- receiving a request for an image of a document relating to the selected second corporate entity; and
- presenting the image to the user.

9. A computer-readable medium storing processor executable instructions comprising instructions to:

- generate a user interface including a plurality of user selectable corporate entities and a user selectable corporate information category tab;
- receive a user selection of a corporate entity via the user interface;
- retrieve via a processor, corporate information of the user selected corporate entity, wherein the corporate information includes at least ownership information, legal documents information and contact information relating to each corporate entity;

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determine a plurality of corporate entities having ownership relationships with the user selected corporate entity based on the retrieved corporate information;

present a tiered selectable corporate ownership structure including the determined plurality of corporate entities showing ownership relationships and the user selectable corporate information category tab based on the retrieved corporate information,

wherein a first one of the plurality of corporate entities is at least a partial owner of a second one of the plurality of corporate entities and is graphically presented as being organizationally upstream from the second one of the plurality of corporate entities,

wherein a third one of the plurality of corporate entities is at least partial owned by a fourth one of the plurality of entities and is graphically presented as being organizationally downstream from the fourth one of the plurality of entities, and

wherein each of the plurality of corporate entities is shareholder-owned;

- receive a selection of the second corporate entity;
- receive a selection of the user selectable corporate information category tab;
- retrieve a category of corporate information corresponding to the one selected corporate information category tab and relating to the selected second corporate entity based on the retrieved corporate information; and
- present the retrieved information to a user.

10. A computer-readable medium according to claim 9, wherein the determined information comprises one or more of:

- information relating to a formation of the second corporate entity;
- a location of corporate documents relating to the second corporate entity;
- contact information relating to the second corporate entity;
- ownership information relating to the second corporate entity;
- information relating to regulators of the second corporate entity;
- information relating to officers of the second corporate entity;
- information relating to jurisdictions in which the second corporate entity is qualified to do business;
- information relating to reports filed or to be filed on behalf of the second corporate entity;
- controllers information relating to the second corporate entity; and
- funds information relating to the second corporate entity.

11. A computer-readable medium according to claim 9, further comprising instructions to:

- receive instructions to generate a document including document information relating to the second corporate entity;
- determine the document information;
- generate the document; and
- present the document to the user.

12. A computer-readable medium according to claim 9, further comprising instructions to:

- a step to receive instructions to edit the determined information;
- a step to determine whether the user is authorized to edit the determined information; and
- a step to edit the determined information if it is determined that the user is authorized to edit the determined information.

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13. A computer-readable medium according to claim 12, further comprising instructions to:
associate information identifying the user with the edited information.

14. A computer-readable medium according to claim 12, further comprising instructions to:
present an indication that the determined information is in the process of being edited.

15. A computer-readable medium according to claim 9, the process steps further comprising instructions to:
associate information identifying a date on which the information was the edited information.

16. A computer-readable medium according to claim 9, the process steps further comprising instructions to:
receive a request for an image of a document relating to the second corporate entity; and
present the image to the user.

17. An apparatus to manage corporate entities, comprising:
a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

generate a user interface including a plurality of user selectable corporate entities and a user selectable corporate information category tab;

receive a user selection of a corporate entity via the user interface;

retrieve via a processor, corporate information of the user selected corporate entity, wherein the corporate information includes at least ownership information, legal documents information and contact information relating to each corporate entity;

determine a plurality of corporate entities having ownership relationships with the user selected corporate entity based on the retrieved corporate information;

present a tiered selectable corporate ownership structure including the determined plurality of corporate entities showing ownership relationships and the user selectable corporate information category tab based on the retrieved corporate information,

wherein a first one of the plurality of corporate entities is at least a partial owner of a second one of the plurality of corporate entities and is graphically presented as being organizationally upstream from the second one of the plurality of corporate entities,

wherein a third one of the plurality of corporate entities is at least partial owned by a fourth one of the plurality of entities and is graphically presented as being organizationally downstream from the fourth one of the plurality of entities, and

wherein each of the plurality of corporate entities is shareholder-owned;

receive a selection of the second corporate entity;

receive a selection of the user selectable corporate information category tab;

retrieve a category of corporate information corresponding to the one selected corporate information category tab and relating to the selected second corporate entity based on the retrieved corporate information; and
present the retrieved information to a user.

18. An apparatus according to claim 17, wherein the determined information comprises one or more of:
information relating to a formation of the second corporate entity;

a location of corporate documents relating to the second corporate entity;

contact information relating to the second corporate entity;

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ownership information relating to the second corporate entity;

information relating to regulators of the second corporate entity;

information relating to officers of the second corporate entity;

information relating to jurisdictions in which the second corporate entity is qualified to do business;

information relating to reports filed or to be filed on behalf of the second corporate entity;

controllers information relating to the second corporate entity; and

funds information relating to the second corporate entity.

19. An apparatus according to claim 17, the instructions further adapted to be executed by said processor to:

receive instructions to generate a document including document information relating to the second corporate entity;

determine the document information;

generate the document; and

present the document to the user.

20. An apparatus according to claim 17, the instructions further adapted to be executed by said processor to:

receive instructions to edit the determined information;

determine whether the user is authorized to edit the determined information; and

edit the determined information if it is determined that the user is authorized to edit the determined information.

21. An apparatus according to claim 20, the instructions further adapted to be executed by said processor to:

associate information identifying the user with the edited information.

22. An apparatus according to claim 20, the instructions further adapted to be executed by said processor to:

present an indication that the determined information is in the process of being edited.

23. An apparatus according to claim 17, the instructions further adapted to be executed by said processor to:

receive a request for an image of a document relating to the second corporate entity; and

present the image to the user.

24. A processor-implemented method comprising:

generating a user interface including a plurality of user selectable corporate entities and a user selectable corporate information category tab;

receiving a user selection of a corporate entity via the user interface;

retrieving via a processor, corporate information of the user selected corporate entity, wherein the corporate information comprises one or more of:

information relating to a formation of the second corporate entity,

a location of corporate documents relating to the second corporate entity,

contact information relating to the second corporate entity, ownership information relating to the second corporate entity,

information relating to regulators of the second corporate entity,

information relating to officers of the second corporate entity,

information relating to jurisdictions in which the second corporate entity is qualified to do business,

information relating to reports filed or to be filed on behalf of the second corporate entity,

controllers information relating to the second corporate entity, and

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funds information relating to the second corporate entity;
determining a plurality of corporate entities having own-
ership relationships with the user selected corporate
entity based on the retrieved corporate information;
presenting a tiered selectable corporate ownership struc- 5
ture including the determined plurality of corporate enti-
ties showing ownership relationships and the user select-
able corporate information category tab based on the
retrieved corporate information,
wherein a first one of the plurality of corporate entities is at 10
least a partial owner of a second one of the plurality of
corporate entities and is graphically presented as being
organizationally upstream from the second one of the
plurality of corporate entities,
wherein a third one of the plurality of corporate entities is
at least partial owned by a fourth one of the plurality of

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entities and is graphically presented as being organiza-
tionally downstream from the fourth one of the plurality
of entities, and
wherein each of the plurality of corporate entities is share-
holder-owned;
receiving a selection of the second corporate entity;
receiving a selection of the user selectable corporate infor-
mation category tab;
retrieving a category of corporate information correspond-
ing to the one selected corporate information category
tab and relating to the selected second corporate entity
based on the retrieved corporate information; and
presenting the retrieved information to a user.

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